



Formal Methods Europe
Minutes of the 67th meeting (AGM)
Held at the British Computer Society, London, UK
3 April 2019
www.fmeurope.org

The meeting was also webcast.

Present at the meeting were:

- Jonathan Bowen [BCS-FACS and Museophile Ltd.]
- John Cooke [Loughborough U.]
- Ana Cavalcanti (Chair) [U. York]
- Simon Collart-Dutilleul [IFSTTAR] (by weblink)
- Erik de Vink [TU Eindhoven]
- Lars-Henrik Eriksson (Secretary) [Uppsala U.]
- Carlo Furia [USI Lugano] (by weblink)
- Stefania Gnesi [ISTI-CNR]
- Klaus Havelund [NASA/JPL] (by weblink, from §13)
- Einar Broch Johnsen [U. Oslo]
- Diego Marmsoler [TU München] (by weblink)
- Claudio Menghi [U. Luxembourg] (by weblink)
- Mohammad Mousavi [Leicester U.]
- Luis Neves [Sidereus LDA] (by weblink)
- José Nuno Oliveira [U. of Minho] (by weblink)
- Nico Plat [Thanos]
- Pedro Ribeiro [U. York] (by weblink)
- Elvina Riccobene [U. Milano] (by weblink, from §12)
- Matteo Rossi [Politecnico di Milano] (by weblink)
- Maurice ter Beek [ISTI-CNR]

Apologies had been received from: Marcel Verhoef, Allesandro Fantechi, Cliff Jones, Dino Mandrioli and B.W. Watson.

1 Welcome and agree upon agenda

Ana Cavalcanti welcomed the members present. The agenda was agreed upon.

2 Invitation to join FME

All non-members present were invited to join FME.

3 Minutes of the previous meeting and review of actions

The minutes of the Oxford meeting were approved.

Action 63/2: Lars-Henrik Eriksson and Einar Broch Johnsen to arrange an online membership application system when the FME web site moves from Graz to Oslo.

Done. We are satisfied with the present Google Docs form.

Action 63/3: Ana Cavalcanti and Lars-Henrik Eriksson to produce a report on the membership consultation (on hold until 2018).

Done.

Action 63/4: Ana Cavalcanti to identify members interested in supporting the teaching and industry-related activities of FME.

Done.

Action 65/1: Erik de Vink to investigate the consequences of offering FME members a discount on the FM'19 registration fee.

Done. There will be a discount for FME members.

4 Annual report for 2018

Lars-Henrik Eriksson presented the annual report of the board for 2018 (attached to the minutes). The meeting approved the report.

5 Financial report for 2018

Erik de Vink presented the financial report for 2018 (attached to the minutes). The meeting approved the report.

6 Report by the Independent Financial Examiners

The independent financial examiners (Jonathan Bowen and Matteo Rossi) had individually checked the FME accounts. These reports are attached to the minutes. The meeting discharged the Treasurer from his responsibilities during this period. Ana Cavalcanti thanked the Treasurer and the Independent Financial Examiners for their work.

7 Elections

a) One board member (Treasurer), to serve until the 2022 AGM. In accordance with FME statutes, Erik de Vink stepped down as Board member. He had declined re-election. Nico Plat had offered taking over the role. There were no other candidates for the position. Nico was elected unanimously. Ana Cavalcanti and all present thanked Erik for his services as board member since 2013.

b) One board member, to serve until the 2022 AGM. In accordance with FME statutes, Einar Broch Johnsen stepped down as Board member. Einar had indicated his willingness to serve a further term. There were no other candidates to take her position. Therefore, Einar was reelected unopposed.

c) One Independent Financial Examiner for 2019 and 2020. According to FME statutes, Jonathan Bowen cannot serve another term as independent financial examiner. The meeting expressed its thanks for his service. John Cooke accepted taking this role. He was elected *nem con.*

8 Plan for 2019

Ana Cavalcanti presented the plans by the Board for 2019 (attached to the minutes). The meeting approved the plans.

9 Budget for 2019

Erik de Vink presented the budget for 2019. The meeting approved the budget *nem con.*

10 Symposia

a) Report on FM'18

Erik de Vink reported on the experiences from FM'18 being part of FLoC 2018. (Report attached to the minutes.)

b) Status report on FM'19

Stefania Gnesi reported on the progress of FM'19. It is organised as part of a World Congress and held in Porto, Portugal, the week starting October 7, 2019. The general chair is José Nuno Oliveira (University of Minho) and the PC chairs are Maurice ter Beek (CNR-ISTI) and Annabelle McIver (Macquarie University). The I-day chairs are Joe Kiniry (Galois, Inc.) and Thierry Lecomte (ClearSy). FM 2019 invited speakers will be Erik Poll, June Andronick and Shriram Krishnamurthi. 8 co-located conferences will run and 18 workshops will be organization, besides a doctoral Symposium and 7 Tutorials. The number of abstract submissions is so far quite good.

José Oliveira reported on the progress of the World Congress planning. (Report attached to the minutes.)

11 FormaliSE

Nico Plat and Stefania Gnesi reported that FormaliSE will be held again in Montreal at the end of May 2019 as an ICSE co-located event. The PC chairs are Nancy Day (University of Waterloo) and Matteo Rossi (Politecnico di Milano). It has received a very high number of submissions, 40, out of which 13 were accepted.

12 Book Review Committee report

Matteo Rossi reported from the Book Review Committee. (Report attached to the minutes.)

New action 67/1: Ana Cavalcanti and Matteo Rossi to discuss the Book Review Committee procedures.

13 Teaching Committee report

Luigi Petre had sent a report from the Teaching Committee. (Report attached to the minutes.)

14 Communications Committee report

Einar Broch Johnsen reported from the Communications Committee. (Report attached to the minutes.)

15 Industry Committee report

Klaus Havelund reported from the Industry Committee. (Report attached to the minutes.)

New action 67/2: Klaus Havelund (Industry Committee) and Luigi Petre (Teaching Committee) to liaise on information about the use of FM.

16 Collaboration with BCS-FACS

FME and BCS-FACS reasserted their mutual collaboration. We're welcome to have future AGMs at BCS.

17 Journal-first track partnerships

Ana Cavalcanti presented the plans to have "journal-first" track at FM'19, initially with papers selected from Formal Methods in System Design and Formal Aspects of Computing.

18 Date and place of next meeting

The next meeting will be held during the FM'19 symposium in Porto, October 9 - 11.

19 Other Business

There was no other business.

Summary of open actions

Action 67/1: Ana Cavalcanti and Matteo Rossi to discuss the Book Review Committee procedures.

Action 67/2: Klaus Havelund (Industry Committee) and Luigi Petre (Teaching Committee) to liaise on information about the use of FM.

Formal Methods Europe: report on activities in 2018

The FME Board March 2019

This report is a brief account of the association's activities between 1 January 2018 and 31 December 2018.

1. Board

Board members during the period were Ana Cavalcanti (Chair), Lars-Henrik Eriksson (Secretary), Erik de Vink (Treasurer), Stefania Gnesi (Symposia and Deputy Chair), Einar Broch Johnsen (Publications).

2. Membership

On 31 December 2018 the association had 313 members in total, an increase of 42 from the previous year.

231 members (74%) come from academic institutions, 62 (20%) from commercial institutions and 20 members (6%) have no affiliation or come from other institutions. Roughly 73% of the members are based in Europe. Only a small part of the membership (estimated at less than 10%) is actively involved in FME activities.

104 of the members have a suspended status because of unknown contact details. (They could not be reached for an membership details update request in 2016.)

3. Symposia/Conferences

FM'18

FM'18 was organised as part of FLoC'18 in Oxford. The symposium was held in July. Ana Cavalcanti was the FM representative on the FLoC Steering Committee and Erik de Vink was the FM representative on the FLoC Organising Committee. The PC chairs were Bill Roscoe (Oxford University) and Jan Peleska (University of Bremen). The I-day chairs were Klaus Havelund (JPL), Jan Peleska (University of Bremen) and Ralf Pinger (Siemens). There were 119 registrations, but the actual numbers of attendants could be higher as participants in parallel FLoC events could also attend. 7 workshops were organized as satellite events. 35 regular papers and 9 I-day papers were accepted. FM 2018 invited speakers were Annabelle McIver, Leonardo de Moura and Kim G. Larsen. A questionnaire has been prepared and distributed to receive feedbacks from participants and members.

FM'19

FM'19 will be organised as a World Congress and held in Porto, Portugal, the week starting October 7, 2019. The general chair is José Nuno Oliveira (University of Minho) and the PC chairs are Maurice ter Beek (CNR-ISTI) and Annabelle McIver (Macquarie University). The I-day chairs are Joe Kiniry (Galois, Inc.) and Thierry Lecomte (ClearSy).

FormaliSE

In 2018 FormaliSE was for the first time an official FME conference. It was held on June 2, co-located with ICSE in Gothenburg, Sweden. As usual Stefania Gnesi and Nico Plat were General Chairs. The PC chairs were Patrizio Pelliccione (Chalmers, University of Gothenburg) and Paola Spoletini (Kennesaw University). The event had some 50 attendants and 9 regular papers were accepted.

4. Publications

The FME website was maintained by Einar Broch Johnsen. Hosting was moved from TU Graz to the University of Oslo. The FME mailing lists were maintained by Lars-Henrik Eriksson and hosted by Uppsala University

FME maintains a list of FM events including important dates. The list is available on the FME web site.

The FME events@fmeurope.org e-mailing list is available for announcements related to established conferences in the FM area as well as events organised or sponsored by FME.

FME also has a presence on the LinkedIn web site.

During the year, the new FME Communications Committee was formed. Its purpose is to widen the means of reporting information and spreading interest about FME.

5. Grants and sponsorships

During 2018, FME has sponsored the FormaliSE 2018 conference. Refer to the Financial Report for details.

6. Special Interest Groups

FME currently has no Special Interest Groups.

7. Standing Committees

FME currently has four standing committees: The Book Review Committee (contact: Matteo Rossi), the Awards Committee (contact: Jim Woodcock), the Teaching Committee (contact: Luigi Petre) and the Communications Committee (contact: Einar Broch Johnsen). The committees are making their own reports of their work in 2018.

During 2018 the board was active in setting up an Industry Committee which will be chaired by Klaus Havelund.

8. Industry-Research Collaboration

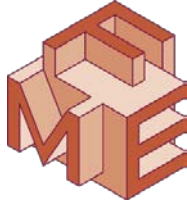
FME has a Memorandum of Understanding with FMICS to collaborate in holding an annual joint industry-focussed event.

There is also a Memorandum of Understanding between FME and the British Computer Society Specialist Group on Formal Aspects of Computing Science (BCS-FACS) on holding an annual joint seminar.

9. Meetings

Two meetings were held in 2018. The AGM was held in Gothenburg (Sweden) on June 2 during the FormaliSE conference. 14 members and 3 non-members participated in the meeting. A business meeting was held in Oxford (UK) on July 16 during the FM 2019 Symposium. 19 members and 12 non-members participated in that meeting.

Additionally, the Board held board meetings both in connection with FME meetings and using Skype.



Financial Report 2018 Budget 2019

(April 2019)

Report to the FME membership
April 3, 2019
Formal Methods Europe

Prepared by Erik de Vink (Treasurer)

Introduction

This document provides:

- A look at the past: the 2018 budget as approved at the 65th FME meeting, AGM 2018, held on 2 June 2018 at the congress center Gothia Towers, Gothenburg (minutes available from <http://www.fmeurope.org>).
- The proposed 2019 budget.

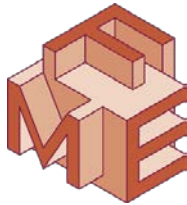
Although income and assets declined the past years, the association remains financially solid. We have sufficient means to cover the potential financial risks involved in organizing our future symposia. However, as interest rates are nihil the possibility to limitedly support the formal methods community at large by sponsoring additional events is limited.

For 2019 the treasurer proposes to continue the support for FormaliSE, now positioned at the 6th International Conference on Formal Methods in Software Engineering co-located with ICSE 2019 in Montreal. However, for the years to come the board and the membership of the association need to take decisions, to maintain balance between income and spending in the long run.

The bank statements and cashbook of our association for 2018 are reviewed by the independent financial examiners: Jonathan Bowen and Matteo Rossi (FME members). The treasurer asks for discharge of his duties for the financial year 2018.

Eindhoven, March 2019

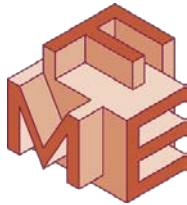
Erik de Vink
Treasurer



Approved Budget 2018

Below the budget for FME as it was approved by the membership at the Annual General Meeting, which was held at the congress center Gothia Towers, Gothenburg (minutes available from <http://www.fmeurope.org>).

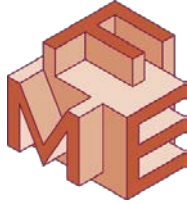
FME BUDGET FISCAL YEAR 2018					
no	description	surplus & deficit		balance sheet	
		debit	credit	debit	credit
01	Nett assets regular account (31-12-2017)			1.00	
02	Nett assets savings account (31-12-2017)			57,754.52	
03	Total assets end 2018				55,805.52
	<i>Administrative items</i>				
04	Interest received on deposit account		0.00		
05	Banking and organisational cost	200.00			
	<i>Operational items</i>				
06	Surplus FM 2018 Oxford		2,000.00		
07	ICSE/FormaliSE 2018	1,250.00			
08	Joint BCS-FACS / FME seminar	500.00			
09	Travel costs FME board	2,000.00			
10	<i>Subtotals</i>	3,950.00	2,000.00	57,755.52	55,805.52
11	Net deficit	1,950.00		1,950.00	
12	<i>Totals</i>	2,000.00	2,000.00	55,805.52	55,805.52



Financial Report Fiscal Year 2018

The surplus & deficit and balance sheet for the fiscal year 2018 is as follows.

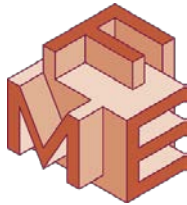
FME SURPLUS & DEFICIT AND BALANCE SHEET FISCAL YEAR 2018					
no	description	profit & loss		balance sheet	
		debit	credit	debit	credit
01	Net assets regular account (31-12-2017)			1.00	
02	Net assets deposito account (31-12-2017)			57,754.52	
03	Total assets end 2018				56,540.97
	<i>Administrative items</i>				
04	Interest received on savings account		0.00		
05	Banking and organisational cost	135.03			
	<i>Operational items</i>				
06	Surplus FM 2018 Oxford		1,014.66		
07	ICSE/FormaliSE 2018	1,250.00			
08	Joint BCS-FACS / FME seminar	0.00			
09	Travel costs FME board	844.18			
10	<i>Subtotals</i>	<i>2,229.21</i>	<i>1,014.66</i>	<i>57,755.52</i>	<i>56,540.97</i>
11	Net deficit	1,214.55		1,214.55	
12	<i>Totals</i>	<i>1,014.66</i>	<i>1,014.66</i>	<i>56,540.97</i>	<i>56,540.97</i>



With respect to this report, the following observations can be made:

- Received interest, item (04), was nihil.
- Banking costs and other operational costs, item (05), a bit less than projected.
- The books for FLoC 2018 in Oxford have moved to Austin in March 2019. A break even is expected. The balance shows the surplus for FM 2018 based on sponsoring/costs that flowed through FME, item (06).
- The FormaliSE workshop in 2018 was co-located with the ICSE 2018 conference in Gothenburg, i.e. Europe-based this time. The support was used for covering part of the organizing and travelling costs of invited speakers. See item (07).
- There was no joint BCS-FACS/FME seminar in London, item (08). To the ceremony for the FME Fellow 2018, Manfred Broy, part of FM 2018, members of BCS-FACS were invited.
- The board held two physical meetings, viz. in Gothenburg and Oxford.
- The fiscal year 2018 was closed with a deficit of € 1,214.55, see item (11), with total assets of € 56,540.97, see item (12).

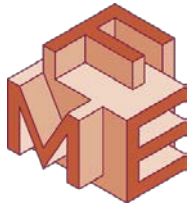
It is observed that the deficit of € 1,214.55 was better than the amount of € 2,000.00 projected. Although the surplus of FM 2018 is only realized half in 2018, travelling cost for the board where significantly lower than foreseen.



Proposed Budget Fiscal Year 2019

The total gross available assets of the association on 1 January 2019 are 56,540.97 Euro. This value is the starting point for the budget 2019, as shown below. The budget shows a deficit of 5,200 Euro, leading to total gross assets of 51,340.97 Euro by 31 December 2019.

FME BUDGET FISCAL YEAR 2019					
no	description	surplus & deficit		balance sheet	
		debit	credit	debit	credit
01	Nett assets regular account (31-12-2018)			127.00	
02	Nett assets savings account (31-12-2019)			56,413.97	
03	Total assets end 2018				51,340.97
	<i>Administrative items</i>				
04	Interest received on deposit account		0.00		
05	Banking and organisational cost	200.00			
	<i>Operational items</i>				
06	Surplus FM 2018 Oxford		0.00		
07	Surplus FM 2019 Porto		p.m.		
08	ICSE/FormaliSE 2019	2,500.00			
09	Joint BCS-FACS / FME seminar	500.00			
10	Travel costs FME board	2.000.00			
11	<i>Subtotals</i>	5,200.00	0.00	56,540.97	51,340.97
12	Net deficit	5,200.00		5,200.00	
13	<i>Totals</i>	0.00	0.00	51,340.97	51,340.97



A few remarks about this budget:

1. Interest (04) and banking cost (05) has comparable to 2018 levels.
2. The surplus for FM 2018 in Oxford (06) was estimated at 2000 Euro in the budget of 2018. Books for the central budget of FLoC were planned to be closed end 2018, but are not so yet. Forecasts are that there will be break-even for the substituent conferences including FM.
3. With FM 2019 in Porto to be held in October, no revenue (07) is included in the budget for 2019.
4. FME organizes the FormaliSE as a separate event at ICSE 2019 in Montreal. With ICSE being held in America, FME sponsoring is set to 2,500 Euro to cover travel expenses and organizational cost. See item (08).
5. A joint seminar with BCF-FACS is planned for April 2019 (09).
6. Travel costs for the board (10) to accommodate for the AGM 2019 in London and the business meeting at FM 2019 in Porto.
7. The budget shows a substantial deficit. FM 2018 generated almost no income unfortunately. However, total assets remain above 50,000 Euro, the amount of reserves to cover both a complete and a partial financial fiasco when organizing FM. Prospects for FM 2019 in Porto are good.

END OF REPORT



POLITECNICO
MILANO 1863

DIPARTIMENTO DI
ELETTRONICA
INFORMAZIONE E
BIOINGEGNERIA

Milan, April 1st, 2019

Formal Methods Europe
Attn. dr. E.P. de Vink
Meerhovendreef 34
5658HA Eindhoven

Dear members of the FME Board,
Dear FME members,

I have completed my review of the financial records of Formal Methods Europe for the year 2018, provided to me by the FME treasurer, Erik P. de Vink.

I have found them to be in good order, and I found no discrepancies between the financial report, the list of transactions reported in the worksheet compiled by the treasurer, and the bank statements.

I have also checked the report provided as part of the documentation, and I have found no problems in it, so I advise the AGM to agree with it.

In looking at the documents, what surprised me was the lack of significant surplus from the organization of FM18, which was held as part of FLoC. If the lack of surplus continues also in future years, that might negatively impact on the health of the association. Assuming that the lack of surplus was a consequence of the fact that FM18 was part of a federation of conferences (the report of the FME treasurer indicates that the situation should be different for FM19), this suggests that, even though I personally enjoyed FM being part of a larger group of conferences, the arrangement of FM18 cannot be sustained long-term, and it should be used sparingly.

Sincerely,

Matteo Rossi
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TO WHOM IT MAY CONCERN

23 March 2019

Dear Sir/Madam,

Financial examination for Formal Methods Europe (2018)

I write as financial examiner for Formal Methods Europe (FME) during the year 2018, as selected at the 2017 FME AGM held in London. With respect to my background, I am an Emeritus Professor of Computing in the School of Engineering at London South Bank University and Adjunct Professor at Southwest University (Chongqing, China), in computer science, so not a financial expert. However, I do run my own UK company, Museophile Limited, with annual accounts returned to Companies House in the UK.

I have inspected the five PDF documents and one Excel spreadsheet (the cashbook) provided to me by FME. The cashbook records a small decrease of €1,214.55 from €57,755.52 (matching the records that I inspected last year) to €56,540.97 over the year. There are bank charges of €10.50 per month (a small increase from €10.40 last year). The main income was €2,000 for sponsorship income at the FM 2018 conference in Oxford (half from VerifyThis and half from Springer). The BCS FACS Specialist Group sponsorship of the FME Fellow Award at FM 2018 is not recorded, but perhaps this was paid directly to the overall conference organizers in Oxford. Some clarification of this would be helpful. (Note that I am Chair of BCS FACS!) Similarly, any income from FM2018 is not recorded. The main expenses for the year are €1,250 for sponsorship of FormaliSE 2018, €920.00 for an invited speaker at FM 2018, €530.18 for FME board expenses with respect to the FME Fellow Award at FM 2018, and smaller amounts for FME AGM travel and website costs. The €3,300 total for four student bursaries at FormaliSE 2018 was paid for money flow reasons (as explained separately by email) and reimbursed subsequently. There are a few minor typographical errors in the cashbook, but the numbers look OK. I have done spot checks against most of the actual bank account and savings account records; all that I viewed matched correctly.

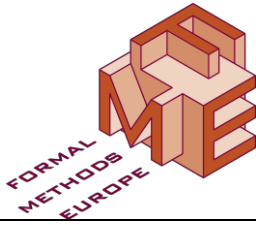
The report reflects accurately the financial situation, with comments on the slight decline of assets, but with a continued good reserve available. It is proposed to continue sponsorship of Formalise, collocated with ICSE in 2019 in Montreal, Canada. Overall, I could not find any errors in the cross-checks that I made for figures between the various documents.

In summary, I believe that, as last year, the FME accounts are in order and well run. I advise the FME AGM to be held at the BCS London Office on 3 April 2019 to accept these documents as a record of FME's financial activities in 2018. I would ask for clarification of the BCS FACS sponsorship of the FME Fellow Award in 2018. If you require any further information, please feel free to contact me via email on jpbowen@gmail.com or phone/text on +44 (0)7765 152996.

Yours faithfully,

Prof. Jonathan P. Bowen

Become what you want to be



Priorities

- Success of FM 2019 and FormaliSE 2019
- Start plans for FM 2021

Symposia

The main focus is the successful running of FM2019 and FormaliSE 2019, and planning of FM 2021. FM2019, in particular, will be organized as the Third World Congress, and so it is a special year. To take the views of the community on how best to further strengthen the symposium, we will organize a consultation.

Responsible: Stefania Gnesi

Membership

We have achieved a sustainable (modestly increasing) level of membership. We will continue to make sure that the membership reflects the active members of the society.

Responsible: Lars-Henrik Eriksson

Finances and sponsorship

We do not foresee a need to review our policies fundamentally in the coming year. However, we will review this in the light of performance, and if the current reserves warrant it, invite special initiatives if appropriate.

Responsible: Erik de Vink

External relations

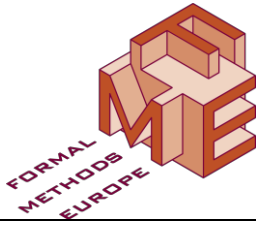
We will continue our cooperation with BCS-FACS and FMICS. We will continue to support and encourage initiatives including the FormaliSE conference at ICSE.

Responsible: Ana Cavalcanti

Publications

We will expand our means of communication with the community. Besides the website, which will remain as the FME's primary medium for disseminating its activities, we will use Twitter, LinkedIn, and YouTube. We will also experiment with holding the FME meetings as webinars.

Responsible: Einar Johnsen



FME Fellowship and Lucas Prize

We will work with the Awards Committee to confer the third FME Fellowship during and a second Lucas Award during FM2019.

Responsible: Ana Cavalcanti

Book reviews

We will work with the Book Review Committee to start publishing the first book reviews already in 2019 and establish a steady stream of publications.

Responsible: Matteo Rossi/Ana Cavalcanti

Support for teaching

We will continue to work with the Teaching Committee to take forward ideas raised in the membership consultation to support teaching of formal methods. We will strive to support colleagues in various ways, especially young academics.

Responsible: Luigia Petri/Ana Cavalcanti

Formal methods in industry

We will work with the membership to create a committee to take forward ideas raised in the membership consultation to engage with industry to promote and support use of formal methods. The industry day will continue to be an important part of our agenda, but we will seek to support other activities, increasing the visibility of formal methods via sharing of information and organisation of events, for example.

Responsible: Klaus Havelund/Ana Cavalcanti

Coordination of events

We will keep the list of upcoming events in our homepage up to date and comprehensive to include major events in the area of formal methods.

Responsible: Einar Johnsen

Considerations regarding FM2018 being part of FLoC 2018 in Oxford

By Erik de Vink, organizing chair FM 2018, Oxford (April 2, 2018)

Formal Methods 2018 was one of the constituent conference of the Federated Logic Conference 2018 held in Oxford UK from July 6 to July 19, 2018. FM2018 activities comprised FM-affiliated mid-FLoC workshops on Saturday July 14 (FM Doctoral Symposium; F-IDE 2018; Ouverture workshop), the symposium itself from Sunday July 15 to Tuesday July 17, and FM-affiliated post-FLoC workshops on Wednesday July 18 and Thursday July 19 (AVoCS 2018; 2018 Refinement workshop; TLA+ community event; VaVAS workshop). 116 delegates subscribed for the FM Symposium; there are no participation details for the workshops, but these were in the usual range.

FM 2018 was held in a pleasant and vivid atmosphere. The Oxford venue was very nice; logistics were well arranged. It was clearly noticeable that our invited talks were also attended by delegates from other conferences. In general there was mobility among our own parallel tracks including I-Day, conferences and workshops.

Being part of FLoC which had an organization committee in place (chaired by Marta Kwiatkowska and Daniel Kroenig) the board of FME decided in its meeting on December 7, 2015 to join FLoC to reach out to the logic community and to act as organization committee for FM2018 with Ana Cavalcanti as member of the FLoC steering committee representing FM and Erik de Vink as organizing chair for FM assisting the PC-chairs Jan Peleska and Bill Roscoe as well as Klaus Havelund, main organizer of I-Day. Specific activities that usually are lying with the organizing committee but not done by the Oxford team, in particular FM-specific publicity, to be taken up by members of the board.

Einar Broch Johnsen represented FM at a kick-off meeting in Oxford at April 22, 2017 where the venue and budget set-up was presented. The venue looked very good and flexibility was offered to constituent conferences regarding the budget including compensation of extra costs in the registration fee. It proved however difficult to position FME as financial stake-holder, relying on a modest surplus of its symposium to ran the association itself.

End of 2017 it turned out that the process of selecting invited speakers was happening at two levels: at the level of FLoC led by Prakash Panangaden at the level of FM led by Jan Peleska and Bill Roscoe. In the budget there was coverage for the FLoC-level keynote speakers (in our week George Gonthier and Byron Cook; after a swap with Peter O'Hearn who had been invited speaker at FM 2016 in Limassol). The planning of the FLoC keynote speakers as well as other FLoC activities (e.g. the Formal Methods in Industry gathering on Saturday, occasionally mistakenly identified with FM's I-Day, overlapping with our pre-FM workshops) interfered with the normal way of planning for FM. Also the slot allotment of invited speakers to support sharing of them led to unusual situations, like starting with a technical session on the very first day of FM because of the parallel invited talk in CAV and having technical contribution added to an invited talk in one session. It was difficult to define a slot for the FME Fellow ceremony. Finding additional rooms, e.g., to have I-Day next to two parallel tracks as was considered at a moment, was not possible.

Regarding the budget the flexibility for constituent conferences did not materialize. FM could not set its own registration fee while it needed to cover the registration and possible other costs for one of its invited speakers (as for FLoC only two were covered) and the FME Fellow. By sponsoring in kind of Microsoft of Leonardo da Moura and of BCS/FACS of the FME Fellow ceremony the negative effect on the FM sub-budget was mitigated. During the organization process from early 2017 tot summer 2018 no insight was given in the actual numbers, estimates and figures. At the time of the AGM in London on April 3, 2019 no final outcome of the books of FLoC 2018 and hence of FM 2018 is known. The books moved in March from the FLoC 2018 organization in Oxford to the FLoC chair in Austin with an indication of 40K pound surplus. The forecast is that after deduction of costs made in Austin the overall outcome will be break even.

There are clear benefits of being part of a large federated conference like FLoC. It has to be discussed whether the limited influence on the budget and the restrictions on the program are outweighed by these benefits.

PROGRESS REPORT

DATE: APRIL 3RD, 2019

Summary

This document reports on the progress of organizing the 3rd World Congress on Formal Methods (FM'19) taking place in Porto next October (week 7-11, 2019).

1 FM'19 Events

The 3RD WORLD CONGRESS ON FORMAL METHODS will be made of

- 9 main conferences or symposia (including FM 2019, the host symposium),
- 20 workshops (including the DS and the i-Day) and
- 7 tutorials

as follows:

- Conferences / symposia:
 - FM — Formal Methods
 - LOPSTR — Logic-Based Program Synthesis and Transformation
 - MPC — Mathematics of Program Construction
 - PPDP — Principles and Practice of Declarative Programming
 - RV — Conference on Runtime Verification
 - SAS — Static Analysis Symposium
 - TAP — Tests and Proofs
 - UTP — Unifying Theories of Programming
 - VECoS — Verification and Evaluation of Computer and Communication Systems
- Workshops:
 - DS — Doctoral Symposium
 - iD — i-Day
 - AFFORD — Practical Formal Verification for Software Dependability
 - DALI — Dynamic Logic: New Trends and Applications
 - DataMod — 8th International Symposium "From Data to Models and Back (DataMod)"
 - EFM — International Workshop on Empirical Formal Methods
 - F-IDE — Formal Integrated Development Environment
 - FMAS — Formal Methods for Autonomous Systems
 - FMBC — Workshop on Formal Methods for Blockchains
 - FMIS — Formal Methods for Interactive Systems
 - FMPriv — 2nd Workshop on Formal Methods in Privacy
 - FMTea — Formal Methods Teaching Workshop and Tutorial
 - HFM — History of Formal Methods
 - NSAD — 8th International Workshop on Numerical and Symbolic Abstract Domains
 - OVT — Overture Workshop
 - OpenCERT — 9th International Workshop on Open Community approaches to Education, Research and Technology
 - REFINE — Refinement Workshop 2019
 - RPLA — Reversibility in Programming, Languages, and Automata
 - SASB — 10th International Workshop on Static Analysis and Systems Biology
 - TAPAS — 10th Workshop on Tools for Automatic Program Analysis
- Tutorials:
 - ALLOY — Formal software design with Alloy and Electrum
 - CbC — The Correctness by Construction Approach to Programming

- FM4BioMed — Tutorial and Workshop on Formal Methods for BioMedicine
- FRAMA-C-IoT — Formal Verification of IoT Software with Frama-C
- KEYMAERA-X — Modular Formal Verification of Cyber-Physical Systems with KeYmaera X
- MLFV — ML + FV = â?! A Gentle Introduction to the use of Machine Learning within Formal Verification Tools
- SRV — Stream-based Runtime Verification

The current, overall schedule¹ is as follows:

7 Oct	8 Oct	9 Oct	10 Oct	11 Oct
FMIS	UTP	FM	FM	FM
FMTea	FM4BioMed	FM	FM	FM
DS	TAPAS	SAS	SAS	SAS
PPDP	PPDP	PPDP	KEYMAERA-X	HFM
EFM	RV	RV	RV	RV
MPC	MPC	MPC	FRAMA-C-IoT	FMAS
VECoS	VECoS	VECoS	CbC	iD
REFINE	OVT	TAP	TAP	TAP
F-IDE	LOPSTR	LOPSTR	LOPSTR	ALLOY
DataMod	DataMod	DALI	MLFV	SRV
AFFORD	OpenCERT	RPLA	FMPriv	FMBC
	NSAD			
	SASB			

2 Work force

The organizing committee consists of 7 staff + 5 technical/admin support, all from the INESC TEC research institute.

On the scientific front, a total of 461 delegates are currently² involved in the PCs of FM'19 events. For these, an EasyChair group licence was bought catering for 800 submissions altogether³.

The workshop and tutorial co-chairs have done a wonderful job in handling a significant number of workshops and tutorials.

At the time of writing, the overall list of FM'19-related contacts consists of 717 people.

3 Publication

The following outcome of FM'19 in terms of scientific publications is expected: 11 LNCS volumes (including the post-congress LNCS volume jointly collecting contributions from the workshops), 1 ACM proceedings volume and 1 ETPCS. The FM 2019 symposium will include, for the first time, a Journal-First Track.

4 Dissemination

The main information resource of FM'19 is the congress' website, launched at FM'18 in Oxford (July 2018). Currently, it includes:

- the FM Week page, which links to all the events of the congress and, in particular, to the FM 2019 (host) symposium;
- the Invited Speakers page, where a short bio is given of each invited speaker (updated each time new ISs are invited by event chairs);
- the Dates page, where visitors can look at the dates of all the events in a searchable, integrated manner;
- the Calls page, where a similarly integrated view is given concerning calls-for-contribution, including links to the EasyChair submission pages and to live YouTube presentations by event chairs⁴;
- the Committees menu, linking to information about the committees of events related to the host symposium;

¹ This schedule is still subject to minor adjustments.

² Some PCs are as yet incomplete.

³ This figure was calculated from the expected submission numbers sent by event chairs.

⁴ These videos are available from the FME YouTube channel. Collecting, editing and publishing such videos is ongoing.

- the [Sponsor FM'19](#) page, calling for sponsorship and listing the sponsors who have been so kind to support the congress thus far⁵;
- the [Venue](#) menu, giving access to details about the venue, travelling, accommodation, etc — a page to become more and more informative and prominent the closer we get to the call for participation.
- the [Twitter](#) channel of the congress, whereby regular updates are provided to Twitter users and the general public.

Last December, the [FM'19](#) poster was posted by surface mail to 400+ addresses. The Publicity chair has also been in charge of emailing call-for-papers as requested by the chairs of the main events of the congress.

Some editorial proposals will soon be sent to the national media, in order to create a buzz and impact on the social communication.

5 The venue

[FM'19](#) will take place in the *Alfândega Porto Congress Center* ([APCC](#)). We shall fill the rightmost block of the 2nd tier of the main building and the two rooms of the Museu das Descobertas building, on the other side of the road.

Due to the large number of workshops, we had to book extra space in a nearby hotel⁶ along the same road facing river Douro. This is the same hotel where the invited speakers will be accommodated. There will be a shuttle between the [APCC](#) and this hotel, which is within walking distance from the [APCC](#) main site for participants wishing to walk along the river.

6 Participation

Looking at the overall event schedule above, we are prepared for the following upper and lower bounds concerning participation:

	7	8	9	10	11
Low	225	305	409	327	315
High	341	460	555	460	445

The 'High' row adds up the participation figures provided by the event chairs. The 'Low' row is less optimistic — it discounts 25% from such numbers and trims workshop/tutorial participation to a maximum of 13 attendants.

For safety, the 'Low' row is the default scenario on which we are calculating the budget etc. Should we have higher participation numbers, we do not take risks because the spaces we have reserved are larger than necessary.

7 Accommodation

The [Accommodation](#) page in the website gives details about nearby hotels. For convenient prices [Airbnb](#) is recommended — it is widespread and cheaper than many hotels.

8 The social program

Figure [1](#) gives the timetable of sessions of the whole FM Week. Event organizers can use each slot the way they find most convenient. One hour slots accommodate invited speakers or (typically) two paper presentations. Chairs can also decide to stop earlier than 6pm.

Block 4 does not exist on Thursday (Oct 10) afternoon because of the social program. This will consist of an excursion visiting the Port Wine caves in Gaia, on the other bank of the river, as part of a [ROTA DO DOURO](#) cruise upstream, ending in the congress banquet. This will take place at *The Baron's Hall and Gallery* of [REAL COMPANHIA VELHA](#) — the oldest Portuguese Port wine company (1756) — in Gaia. The return trip will be by bus.

⁵ The OC is actively engaged in trying to obtain more sponsors.

⁶ Hotel [Vincci Porto](#)

October 2019

W41	Mon 7	Tue 8	Wed 9	Thu 10	Fri 11
all-day					
09:00	09:00 Block 1	09:00 Block 1	09:00 Block 1	09:00 Block 1	09:00 Block 1
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00	10:30 Block 2	10:30 Block 2	10:30 Block 2	10:30 Block 2	10:30 Block 2
12:00					
13:00	12:30 Lunch	12:30 Lunch	12:30 Lunch	12:30 Lunch	12:30 Lunch
14:00	14:00 Block 3	14:00 Block 3	14:00 Block 3	14:00 Block 3	14:00 Block 3
15:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
16:00	15:30 Block 4	15:30 Block 4	15:30 Block 4		Coffee Break 16:00 Block 4
17:00					
18:00					

Fig. 1. FM week schedule.

9 The registration

Registration is planned to open in June/July. The OC is currently designing the registration process and deciding upon which conference registration system to use. We are inclined to <https://www.weezevent.com>, which [HASLab](#) has used in previous conferences. Another alternative is <https://www.cvent.com/>, but this is much more expensive. We are seeking advice from the organizers of FLoC 2018 in this respect.

HASLab / INESC TEC & U. Minho,
April 2, 2019



José Nuno Oliveira
General chair of FM'19

Report on the activity of the FME Book Review Committee

March 2019

The Book Review Committee (BRC), which was established by the FME board at the AGM held in Eindhoven in April 2016, has the aim of providing the FM community at large with high-quality reviews of books that are of interest for the community. Reviews should highlight the strengths and weaknesses of each book, to help researchers, students, and professionals in the FM domain in their searches for reference texts in their areas of interest.

The members of the BRC are the following:

- Wan Fokkink (Vrije Universiteit Amsterdam, NL)
- Einar Broch Johnsen (University of Oslo, NO)
- Constance Heitmeyer (Naval Research Laboratory, US)
- Peter Gorm Larsen (Aarhus University, DK)
- Annabelle McIver (Macquarie University, AUS)
- Matteo Rossi (Politecnico di Milano, IT, chair)

We recap here the ground rules and procedures for the production of reviews.

Reviews will be managed by BRC members, and they could be performed by BRC members themselves, or by external people contacted by BRC members. Normally, the committee does not accept unsolicited reviews; however, it will be glad to consider suggestions for books to be reviewed.

The books to be reviewed should be of interest for the FM community, and they should be of reasonably recent publication (where “recent” can be a flexible concept, although indicatively the suggestion is to consider books that are not older than 4-5 years).

Reviews will not be anonymous. They will be published on the FME website. Reviews will also be referred for possible publication (possibly in revised form) in the *Formal Aspects of Computing* journal, but the final decision in this case rests with the editor in chief of the journal (who has appointed Dominique Mery as curator of reviews for the journal).

In addition to a review produced some months ago for the *Concrete Semantics* book (by T. Nipkow, and G. Klein, published by Springer), which was also published in the *Formal Aspects of Computing* journal (<https://doi.org/10.1007/s00165-018-0454-6>), 3 books are under review, but the process of producing the reviews is still ongoing.

A fourth book is currently under review, but we might seek an additional opinion on it.

A pair of other books have also been selected for review, and the committee has identified reviewers who are willing to review them.

Another book has been identified for a possible review, but we are still looking for a potential reviewer.

FME Teaching Committee, March 2019

Who we are

The FME Teaching Committee was established at the end of 2017. Our main goal is to support and improve the teaching of formal methods worldwide. The members of the committee are:

- Brijesh Dongol, University of Surrey, UK
- Catherine Dubois, ENSIIE, France
- Joao Ferreira, University of Lisbon, Pt
- Bernd Fisher, Stellenbosch University, South Africa
- Rustan Leino, Amazon Web Services, US
- Dino Mandrioli, Politecnico di Milano, Italy
- Alexandra Mendes, Portugal
- Luigia Petre, Åbo Akademi University, Finland (chair)
- Leila Ribeiro, Federal University of Rio Grande do Sul, Brazil
- Pierluigi San Pietro, Politecnico di Milano, Italy
- Graeme Smith, University of Queensland, Australia
- Kenji Taguchi, CAV, Japan

Meetings

In 2018, we held three Skype meetings, in February, May and October.

Accomplishments

1. One important accomplishment consisted in setting up a repository of Formal Methods courses that steadily grows. The current version is located at <https://github.com/luigiapetre/Formal-Methods-Courses/issues>. This repository is fed by courses input by their teachers at <https://fmeteaching.dudaone.com/contact>.

We study the linking of our repository with an older repository of courses established about 10 years ago in a project led by José Fiadeiro. Joao Ferreira and Alexandra Mendes – two of the José's former PhD students – are taking care of this. They have resurrected the old database here: https://jff.github.io/fme-teaching/courses_all/ and discovered that only 20 courses out of 117 are still active: https://jff.github.io/fme-teaching/courses_live/.

Joao and Alexandra have also produced a topic-browsable version of the new repository, here: <https://jff.github.io/fme-teaching/>. We can see that we need a better structuring of the course topics, maybe the teachers could choose from a list of proposed topics and only if nothing fits to create their own topic.

2. Another FME Teaching project started was the commitment to organize a teaching workshop as a satellite event of FM 2019 in Porto in October. The entire teaching committee is involved as the PC, with Brijesh, Graeme and Luigia as chairs. We are very happy that Carroll Morgan has accepted to be our invited speaker and Tony Hoare also promised to join us and give a talk. Here is FMTea19's webpage: <https://fmtea.github.io/>.

Here is our webpage, hosted on FME's site: <http://www.fmeurope.org/teaching/>. Contact us at teaching@fmeurope.org.

FME Communications Committee: Activity 2018

Communications Committee. FME established a Communications Committee in October 2018. The aim of the Communications Committee is to support the dissemination of material about formal methods as well as the activities of FME. The committee has the following members:

- [Marcello Bersani](#), Politecnico di Milano, Italy.
Role: Marcello will liaise with the Awards Committee, the Book Review Committee, and the Industry Committee.
- [Carlo A. Furia](#), Università della Svizzera Italiana, Switzerland.
Role: Carlo will work on the communications strategy and guidelines for conferences and liaise with the member of the board in charge of conferences.
- [Einar Broch Johnsen](#), University of Oslo, Norway.
Role: Einar chairs the Communications Committee, maintains the FME website, Twitter account and LinkedIn group. He will work on an overall policy document on communications.
- [Claudio Menghi](#), University of Luxembourg.
Role: Claudio will liaise with the Teaching Committee. Claudio has also developed a questionnaire to collect feedback from FM conferences.
- [Pedro Ribeiro](#), University of York, UK.
Role: Pedro is in charge of communications for FME business meetings. He has investigated webinar platforms, leading to the first online channel for participation at the AGM 2019. Pedro is also in charge of FME's YouTube channel.

Web Site. FME's website <http://www.fmeurope.org> is maintained by Einar Broch Johnsen. It was migrated in 2018 from a Wordpress CMS hosted at Graz University of Technology to a Hugo CMS, which is an open-source static site generator. One advantage of using a static site generator is that the site cannot be broken by updates to the CMS system, and pages are rendered at higher speed. Content is now maintained under version control as part of FME's svn repository, and pushed to the website server. In April 2018, the site was moved from TU Graz to the University of Oslo. In response to concerns about GDPR, the board decided not to track traffic on the website using Google Analytics. Consequently, we do not have statistics on the traffic on the new website.

Upcoming Formal Methods Conferences. As a service to the members we maintain a page with a list of upcoming conferences in formal methods. Its main purpose is coordination among conference organisers. Therefore, we established contacts with the steering committees and actively poll them for conference dates before publication in Call for Papers.

LinkedIn Group. Since July 2010, FME has a presence on the social network LinkedIn. The discussion group is called Formal Methods Europe. Jonathan Bowen is its owner, John Fitzgerald, Bernhard Aichernig, Einar Broch Johnsen and Ana Cavalcanti are the managers of the group. Everybody can read the group. Only members can write. It currently has 1,682 members (last year: 1,670 members).

Twitter. FME has established a Twitter presence with the account @FormalMtds, which currently has 200+ followers. We have started using it, so far mainly to spread information about FM 2019 (which has a separate twitter account).

YouTube. FME has established a YouTube presence with a channel to disseminate formal methods at

<https://www.youtube.com/channel/UC5rZj0AyBudca0YRgEAX-Ow>

It is planned to release material promoting FM2019, and keynotes from the symposium on this channel in 2019.

Report from the Industry Committee

Written by Klaus Havelund (chair)

The industry committee was initiated during December 2018 when Klaus Havelund was asked by Ana Cavalcanti to form this committee. The aim of the committee is to support the infusion of formal methods into industry, as well as obtain feedback from industry as to the usability of various methods in practice.

The industry subpage on the FME website is:

<http://www.fmeurope.org/industry>

Committee Formed

Since the initiation of the committee, 11 additional members have been identified, invited, and added to the committee (which is now in its final form):

[Nikolaj Bjorner](#), Microsoft Research, USA
[Alessandro Cimatti](#), FBK Trento, Italy
[Rance Cleaveland](#), Maryland University, USA
[Jan Friso Groote](#), Eindhoven University, The Netherlands
[John Hatcliff](#), Kansas State University, USA
[Klaus Havelund](#), Jet Propulsion Laboratory/NASA, USA (**chair**)
[Gerwin Klein](#), University of NewSouth Wales, Australia
[Thierry Lecompte](#), ClearSy, France
[Colin O'Halloran](#), D-RisQ Ltd., UK
[Jan Peleska](#), Bremen University, Germany
[Shaz Qadeer](#), Facebook, USA
[Markus Voelter](#), Volter Consulting, Germany

Discussion about Website

The first task of the committee has been to discuss the possible contents of a website for the work of the committee. This discussion took place during March 2019, and resulted in the decision that the website should contain the following elements (aligned with Ana Cavalcanti's original suggestions):

1. A directory of formal methods
2. A directory of industry users of formal methods
3. A directory of cases studies, success stories, and evaluations

4. A list of useful other links

A directory over formal methods is of course not only of interest to the industry but to academia as well. It can therefore be debated whether this directory belongs on the industry website. However, for now we will create and host it there.

The connection to the teaching committee is evident since the use of formal methods requires learning about them. The industry committee will rely on the teaching committee to provide this information. There will be a collaboration between the two committee.

A website is currently under construction (using the static website generator Hugo) but has not yet been made public due to lack of proper contents (the chair spent too much time messing around with static website generator technology).