



## **6<sup>th</sup> International Realistic Mathematics Education Conference**

### ***Making Mathematics Meaningful for Students***

**Grand Cayman, Cayman Islands  
September 20 –22, 2018**

#### **~ First Announcement and Call for Proposals ~**

We cordially invite you to join us on September 20<sup>th</sup> – 22<sup>nd</sup>, 2018, for the Sixth International Realistic Mathematics Education Conference (RME6), a biennial conference held for the first time in the Caribbean (Grand Cayman, Cayman Islands). This three-day conference is supported by the Freudenthal Institute (FI), the Freudenthal Group at Utrecht University, the University of Colorado - Boulder School of Education, Freudenthal Institute US (FIUS) and the Cayman Islands Ministry of Education.

This conference showcases research and practical workshops focused on Realistic Mathematics Education (RME), a Dutch approach to the design of curriculum, assessment and instruction that is widely respected throughout the world as an exemplary approach to mathematics education. RME has evolved over the last 40 years out of the work of Hans Freudenthal, research faculty at the Freudenthal Institute, and designers and mathematics educators throughout the world. Although RME involves some particular design principles, many of its features can be gradually adapted by teachers and school systems, recognising that significant pedagogic improvement take time to evolve.

The Committee decided to host the conference in Grand Cayman as it realises that, as well as being a beautiful island to hold a conference, countries in the Caribbean and Central America are particularly interested in developing approaches to mathematics teaching which focus students on problem solving, gaining number sense and developing an inner ear for mathematical decision making. We believe that the experiences worldwide of the design and implementation of RME will be really significant for all educators working to influence mathematic teaching. We also recognise the need to investigate and share Realistic Mathematics Education as a truly international endeavour.

*The RME practices have been the foundation of improvement in mathematics in Cayman schools. Although Cayman schools have made direct use of some RME materials such as Mathematics in Context, perhaps the strongest influence is on the use of realistic problems as a way of generating the mathematics and as a way through the mathematics. We also strongly encourage students to articulate their thinking, thus encouraging the idea of students as sense makers. Models and manipulatives are used to encourage students to become strategic thinkers rather than followers of the teachers approach. We support teachers to understand the trajectory for students experiencing mathematical development and how this knowledge informs teacher decision making.*

*This approach to teaching takes time to develop and we support teachers on the journey to becoming more effective through Lesson Study, coaching, sample lessons and regular professional development. As well as working with teachers we also work with schools and system leaders in order to generate coherence within and across schools.*

## Who Should Attend?

The programme is organised to address the interests and needs of mathematics educators, district, state or national school leaders, professional developers, researchers, coaches and teachers who are engaged in mathematics education and professionals involved in training or supporting teachers. The content of the 3-day conference addresses elementary, high school and university level mathematics. Mathematics Educators involved in supporting student teachers will gain a great deal from the conference.

## Conference Programme

The RME6 conference will focus on the use of realistic contexts, emergent models, classroom discussions and representations in ways that support mathematical thinking. For teachers to adopt such approaches requires significant support within schools and across school systems. Plenary and interactive workshops will explore curriculum and assessment design, teacher learning and practice, and studies of student learning.

The programme will include keynote speakers and 90 and 60 minute breakout sessions offered by research faculty, designers of educational resources, coaches and teachers who have engaged in ways to support understanding of mathematics from elementary through undergraduate education. The conference will begin with the opening plenary Thursday, September 20<sup>th</sup> at 9:00am.

- The Friday session will start at 9:00 and finish at 4:00pm
- The conference will start at 9:00 on Saturday, September 22<sup>th</sup> and conclude at 4:00pm.
- Local classroom teachers will be invited to attend on Saturday September 22<sup>nd</sup>.

The keynote speakers and their topics are:

**Betina Zolkower** is an associate professor of mathematics education at Brooklyn College, City University of New York, she is particularly interested in developing teachers practices and understanding of mathematics education. She has worked extensively with educators and teachers in Argentina focusing on the use of realistic contexts and models to make mathematics more meaningful for students. Her presentation will focus on developing teachers' practices through the use of lesson study and RME approaches and will draw on her experience in both Argentina and the USA.

**Dietmar Küchemann** is a researcher in mathematics education. He has a long-held interest in examining students' developing understanding of mathematical ideas and in designing materials informed by such knowledge that can be used by teachers to facilitate learning. During his keynote session he will look at some recent materials alongside an examination of the extensive research into late primary and early high school students' increasing competence in algebra and multiplicative reasoning.

**Maarten Dolk** is a researcher at the Freudenthal Institute, Netherlands. He is now an independent math education consultant and CEO of New Perspectives Online. He is particularly interested in supporting teachers through curriculum development and online support. He has worked with educators in Asia as well as co-developing an on-demand, self-directed, multi-pathway system for professional learning ([www. NewPerspectivesOnline.net](http://www.NewPerspectivesOnline.net)). Maarten's presentation will focus on the principles of RME using his experiences in the USA, Europe, Asia, and South Africa to illustrate these.

**Paul Drijvers** is a full professor in mathematics education at the Freudenthal Institute, Netherlands. His research interests include the role of ICT in mathematics education, mathematical thinking, assessment, algebra education, and teachers' professional development. Paul also works as a professor in mathematics education at HU University of Applied Sciences Utrecht. In his contribution, Paul will

address key aspects of Realistic Mathematics Education that will be illustrated by examples from secondary mathematics education. From a more personal perspective, he will explain the talk's title: the (he)art of Realistic Mathematics Education.

## **Call for Presentations and Papers**

The conference programme is open to proposals for 90 and 60 minute sessions that address theoretical and practical work related to the RME6 programme theme. Given the limited number of programme openings for conference speakers, we can only accept a relatively small number of proposals. The programme committee and a panel of reviewers will evaluate proposals based on the extent to which they:

- 1) Present their research or curriculum development described in a way that is accessible to researchers and practitioners, and
- 2) Focus on how practitioners or learners can use the curriculum design principles, findings or related materials in classrooms.

The most competitive proposals will address both of these goals to highlight how design principles and/or research regarding contexts, representations or strategies have resulted in practical applications in classrooms. For example, classroom-based research that involves the development of an instructional sequence using mathematical models to support student reasoning. Likewise, a presentation that focuses on project design, implementation and impact would be valued. Topics can be specific to mathematics domains or involve a broader mathematics didactics perspective.

Papers and related materials will be published in online conference proceedings that will be available to attendees and the greater mathematics education community.

### *Submitting a Proposal*

If you are interested in being a speaker for the conference, please submit your proposal to [frank.eade@gov.ky](mailto:frank.eade@gov.ky) using the template found at the end of this email.

The deadline for submitting a speaker proposal is **Friday, March 30<sup>th</sup> 2018 @ 11:59pm.**

Decisions regarding proposals will be emailed by **Friday 20<sup>th</sup> April 2018**


## **Poster Presentation**

The intention is to reserve one slot for poster presentations reflecting some aspects of practice or research that might be of interest to practitioners. As well as having a display the presenter needs to be available to answer questions from the delegates. If you would like to make a poster presentation, please complete the template at the end of this email and forward to [frank.eade@gov.ky](mailto:frank.eade@gov.ky) by **Friday 20<sup>th</sup> April, 2018**

## Conference Registration

The conference registration page is:

<https://eventpro.ky/rme6/>

Click on  add to cart and proceed to checkout, giving your details

- Register by the 15<sup>th</sup> June pre-enrollment deadline for a reduced conference fee of US\$380
- 16<sup>th</sup> June onwards the standard registration fee is US\$450.
- Lead speakers for an accepted proposal will be able to register for the conference at a discounted speaker rate of US\$250.

Delegates from the Caribbean, Central or South American Institutions are, in addition, eligible to a further discount of US\$130 on the above rates. Candidates wishing to get this discount must first contact [frank.eade@gov.ky](mailto:frank.eade@gov.ky) before proceeding to register for the conference.

Conference registration fee covers lunch, coffee, snacks and related conference materials. The registration fee does not cover lodging and other meals. Participants are responsible for their own travel expenses to and from Grand Cayman. Enrollment for this conference is limited and registration may close early, so please pre-register as soon as possible.

Additionally, there will be a free cocktail reception at the Governor's residence on Thursday 20<sup>th</sup> September, 2018 5:00 pm – 7:00pm. Participants should place this item in their cart when purchasing their conference ticket so that we are able to plan for your attendance.

## Conference Website

Additional information and updates will also be posted to the International Consortium for Realistic Mathematics Education website: [www.icrme.net](http://www.icrme.net)

Excursion options and links to relevant research literature will be available later this spring in conjunction with the posting of a second announcement.

## Accommodation and Travel

Participants must arrange for their own travel to Grand Cayman. The Conference will be held at the Grand Cayman Marriott Beach Resort Hotel, Seven Mile Beach, Grand Cayman. As part of the conference, the Marriott offers a significant discounted rate for a room per night of US\$154 + taxes + service (25%) and with no resort fee charged. The Marriott has set up a specific link for RME delegates: [Book your group rate for RME6 Conference](#)

Method of reservation: Guests will make their own reservations and guarantee with individual credit cards. The charge will be made when you check out from the hotel. Please note that the reservation/booking will include the \$50 per day resort fee which will not be included in the final bill upon check out. It appears at the time of booking as it is an international Marriott fee that can only be waived locally. There are a limited number of rooms at the discounted rate available for 3 days before and 3 days after the conference. Unconfirmed rooms blocked for the conference will be released 30 days prior to arrival. It is also worth noting that you would need to cancel the hotel booking before the 17<sup>th</sup> August to get a full refund.

If you prefer, other hotel accommodation is available via <https://www.booking.com/country/ky.en-gb.html> making sure to tick George Town. Please recognise that hotels will charge 25% extra, and also a resort fee of \$35 to \$60 per day. <https://www.airbnb.com/s/Cayman-Islands> also has some other accommodation available. They will charge the taxes and a cleaning fee. Be aware that taxi fares are expensive so it is sensible to book accommodation reasonably close to the conference venue.

Options for sharing rooms will be posted to the RME6 conference page at [www.icrme.net](http://www.icrme.net)

## **Questions**

Please direct any conference related inquiries to Frank Eade at [frank.eade@gov.ky](mailto:frank.eade@gov.ky)

~~~~ Speaker Proposal Template ~~~~

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September 20 – 22, 2018  
Speaker Proposal

\* Please send to [frank.eade@gov.ky](mailto:frank.eade@gov.ky) by Friday, March 30<sup>th</sup> 2018 @ 11:59pm.

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*Title:*

*Name(s) of presenter(s):*

*Affiliation:*

*Email:*

*Desired duration 60 minutes or 90 minutes please circle    60 minutes       90 minutes*

Proposal Description (500 words)

Option A. If this is a research proposal, include

- I. Purpose of Study
- II. Methods
- III. Findings and Results
- IV. Recommendations for Researchers and Practitioners

Option B. If this describes curriculum development or an instructional sequence, include

- I. Rationale
- II. Design Process
- III. Evidence and/or examples of student work
- IV. Recommendations for Researchers and Practitioners

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**Presenter Proposal Template ~~~~**

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Poster Presentation Proposal

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*Title*

*Name(s) of presenter(s)*

*Affiliation*

*Email*

Poster Presentation Proposal Description (100 words)

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