

Thematic Afternoon

*The French didactic tradition
Didactic interactions between
France and African countries
The case of Tunisia.*

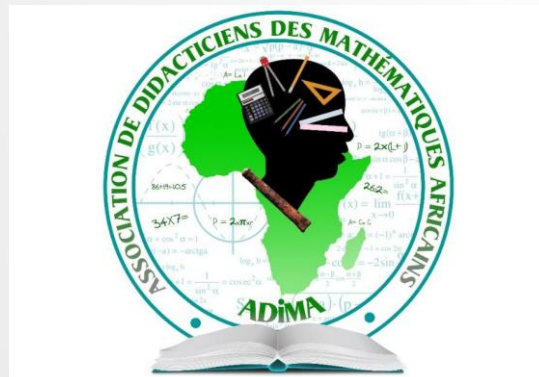
Faïza CHELLOUGUI
Faculty of Science of Bizerte
University of Carthage – Tunisia
chellouguifaiza@yahoo.fr

The past decade has seen increased mathematics education activity within and across a wide large of countries in Africa. The movement of cooperation started in the end of the twentieth century.

In that period, systems of education in many of African countries were reshaped according to the needs of the new societies.

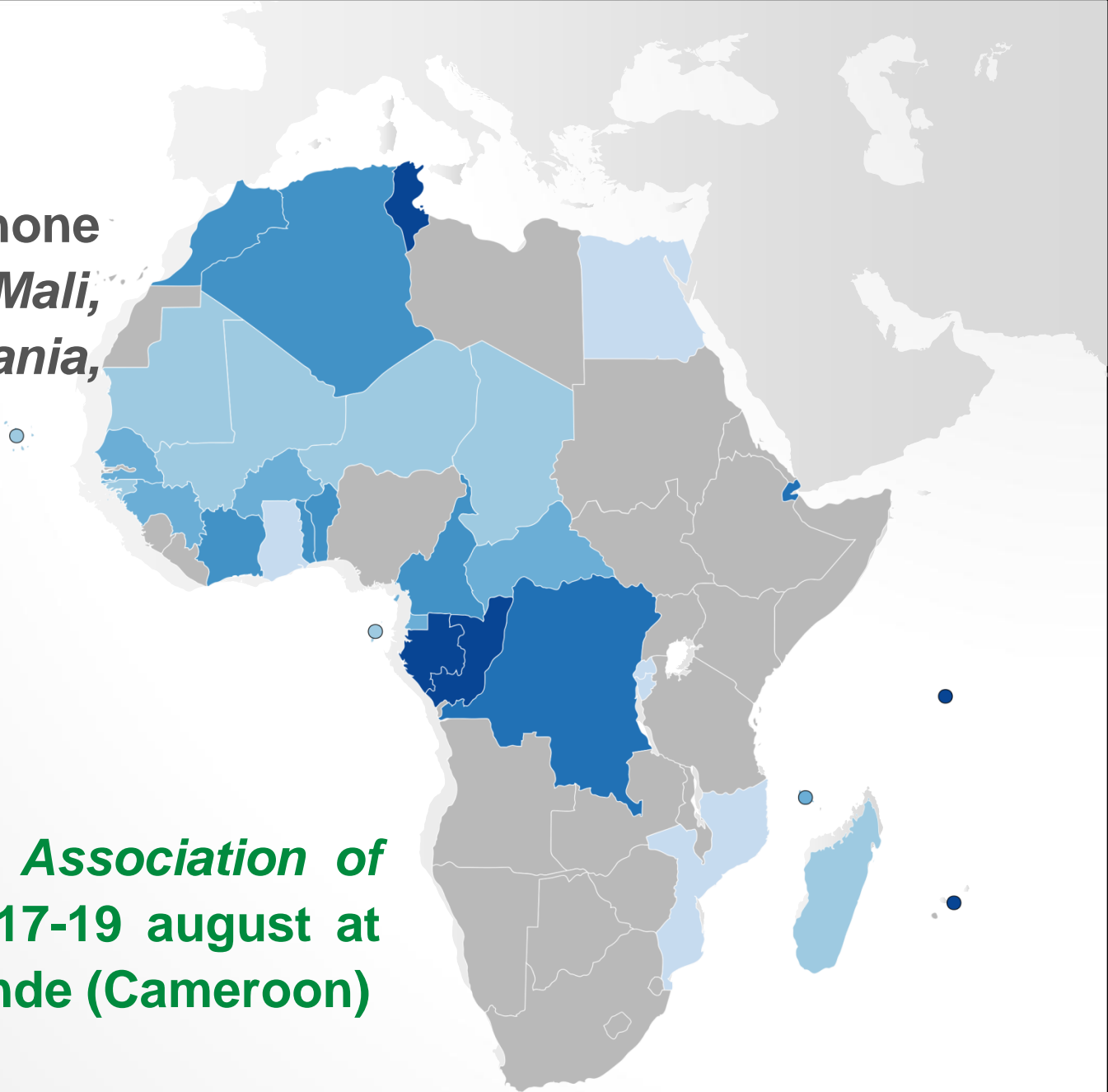


This is the case of Africa Francophone Countries (*Tunisia, Algeria, Senegal, Mali, Madagascar, Djibouti, Niger, Mauritania, Cameroon, etc.*)



<http://Colloque.adima.org>

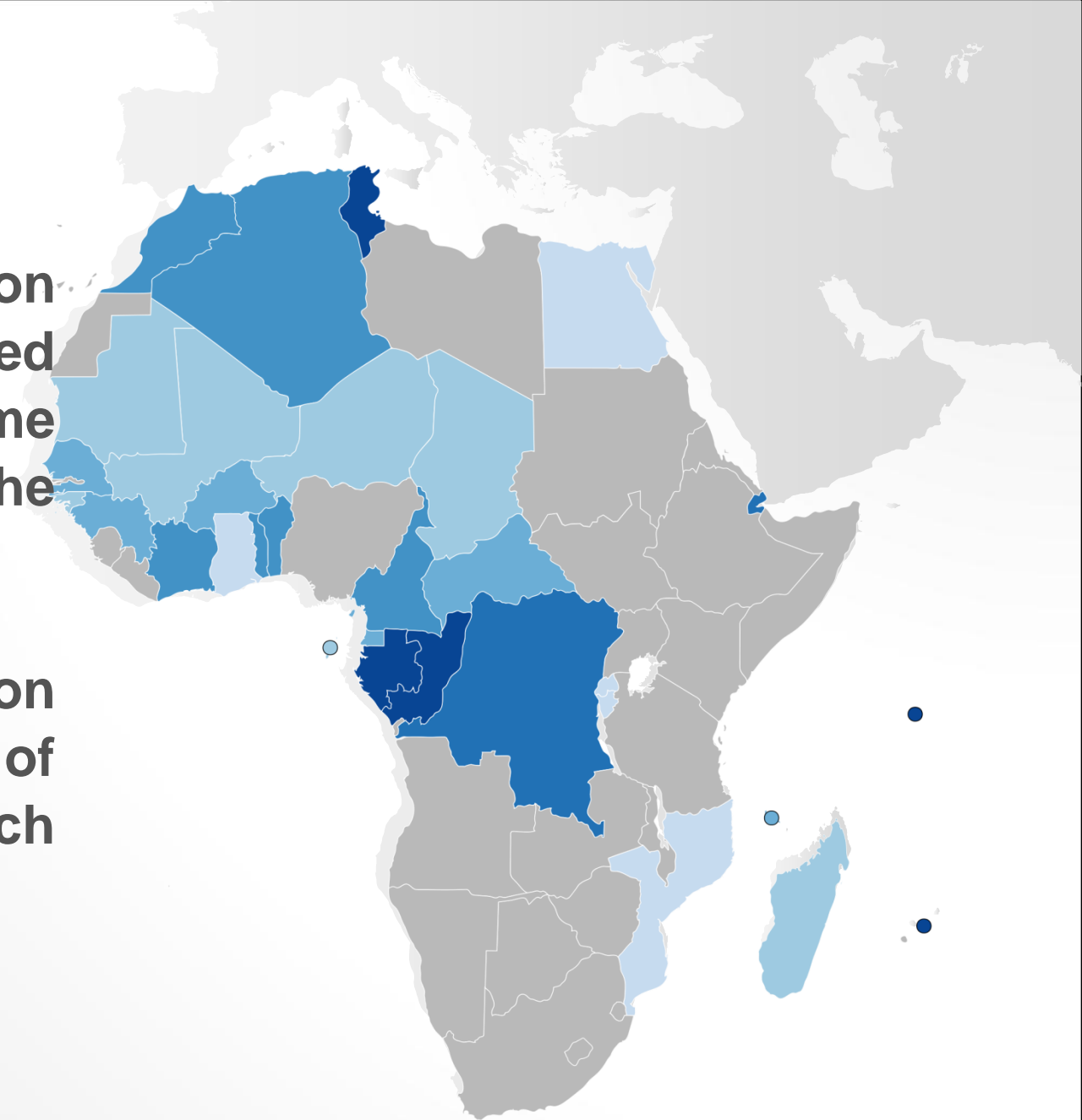
First colloquium ADiMA *Didacticians Association of African Mathematics*, will be held in 17-19 august at ENS the *higher normal school* of Yaounde (Cameroon)



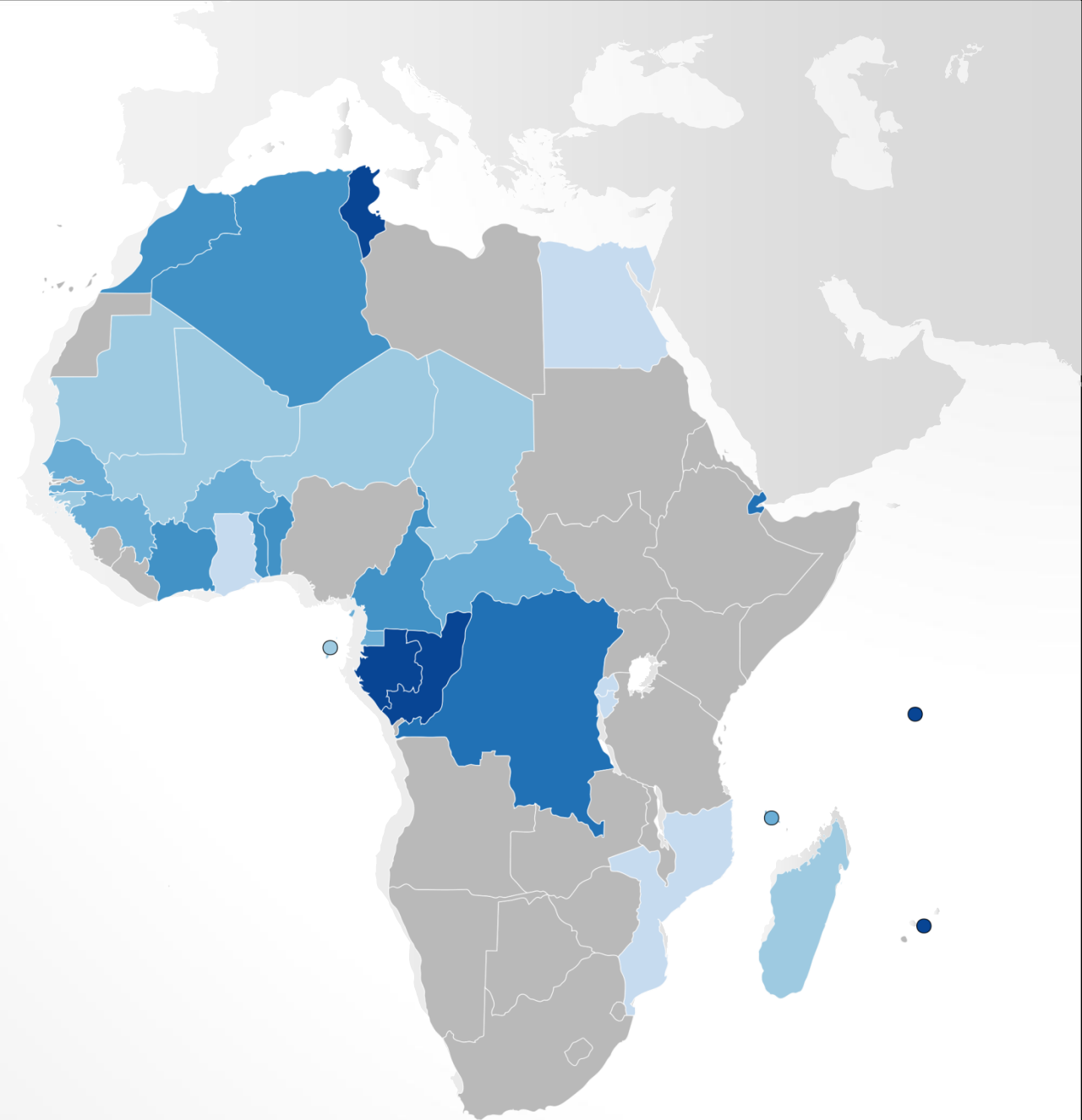


A big movement of communication about mathematics education was led between specialized people of the same country (which means that the beginning was within countries).

The establishment of national education institutes underlines the importance of mathematics education issues in each country.



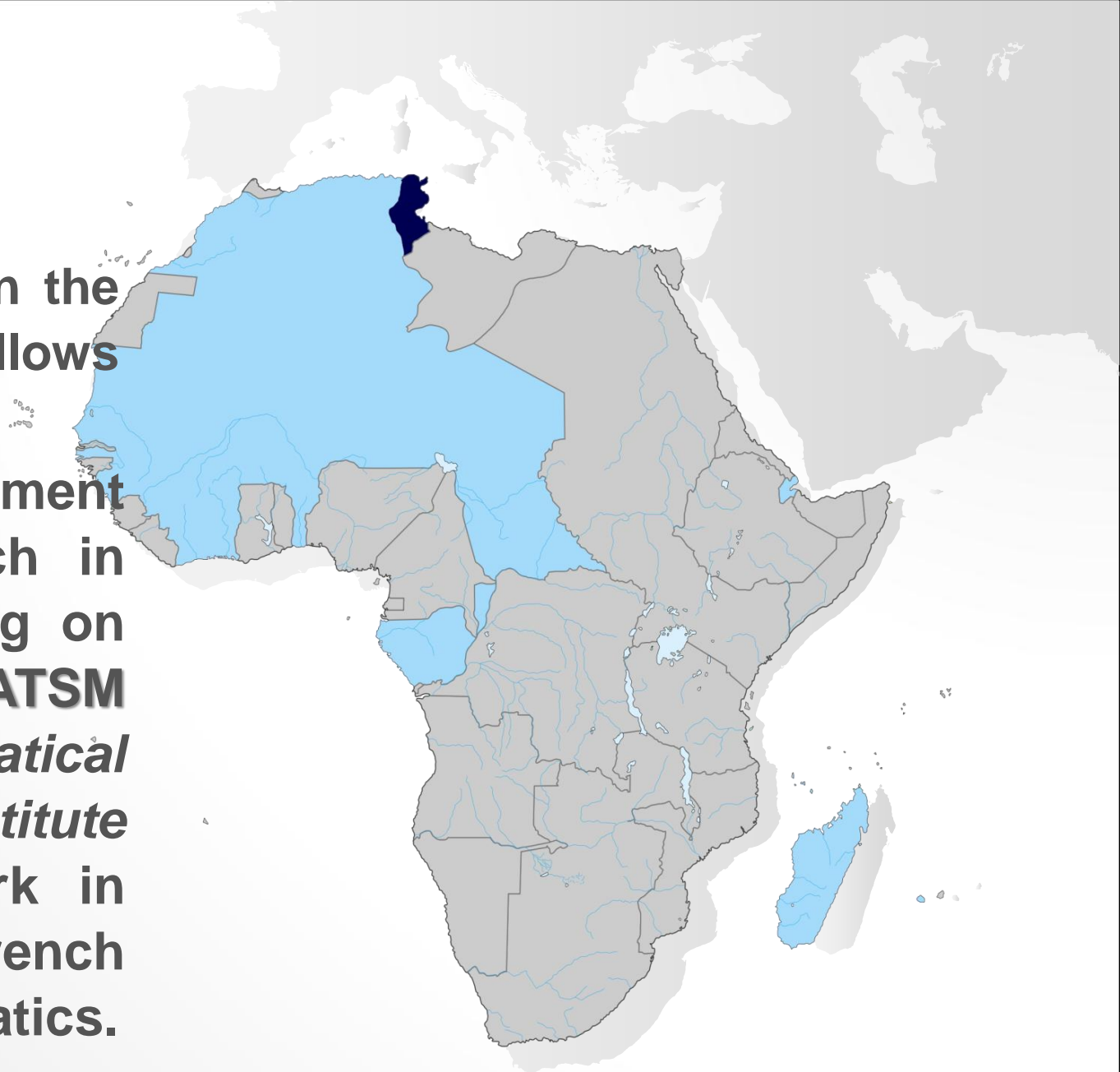
These national institutes allowed cooperation to extend among countries (in this case with France). They raised the need to share information and to cooperate between specialized people on mathematics education of different countries.





The emergence of the cooperation in the field of didactic of mathematics follows the same path.

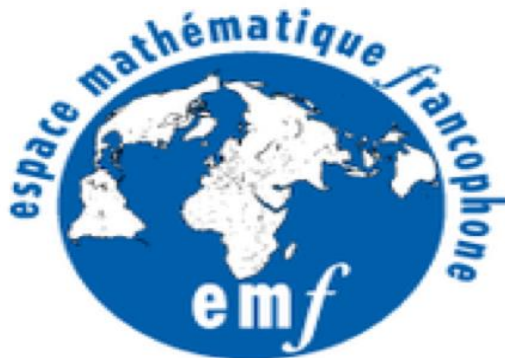
Specifically in Tunisia, the development of a network in didactic research in mathematics was originally leaning on already developed between **ATSM** (*Tunisian Association of Mathematical Sciences*) and **IREM** (*Research Institute of Mathematics Teaching*) network in France and the involvement of French researchers in didactics of mathematics.





The **CIEM / ICMI** *International Commission on Mathematical Instruction* has held colloquiums **EMF** every three years since 2000, opening a space for communication on mathematics education across French speaking countries, with strong link into French-speaking African countries.

EMF colloquiums comply with the principle of the recurrence every three years and the alternation between the North and the South.



The first EMF in 2000 taken place in Grenoble (France) saw a strong delegation from Africa, with the following in 2003 being held in **Tozeur (Tunisia)** over the years.

Other previous conferences were held in *Sherbrooke* (2006), *Dakar* (2009), *Geneva* (2012) and *Algiers* (2015), the next one will be held in *Paris* in 2018.

The holding of EMF in Africa allowed to initiate a regular participation of the African delegation researchers to triennials EMF congresses.

Key elements of the cooperation Tunisia/France among tunisians researchers experience

<http://www.cfem.asso.fr/cfem/ICME-13-didactique-francaise>



Case of Tunisia



INDRUM 2016: First conference of the
International Network for Didactic Research in
University Mathematics

31 Mar-2 Apr 2016 Montpellier (France)



In march 2016 held the first conference of the International Network for Research in Mathematics University (INDRUM2016), known as ERME topic Conference.

The work carried out in Tunisia on higher education have contributed with the participation of Tunisians researchers .

In recent years several Tunisian researchers have been involved in various conferences around the world, and more recently also solicited for scientific responsibilities: ICME, CERME, EMF, INDRUM.

The work conducted by these researchers led to several contributions in proceedings of international conferences: ICME, CERME, EMF, and published articles in journals (RDM and Petitx), chapters and books.





Since 2001 (EEDM11, 11th summer school of didactic of mathematics), several Tunisians researchers have been involved in regularly in biannually summer schools of didactics of mathematics held in France by ARDM (Research association in Didactics of Mathematics).

They contributed to the progress of these schools through the planning of tutorials, at EEDM13 in 2005, EEDM17 in 2013, EEDM18 in 2015.



Nationally, the research conducted in Tunisia resulted in publications in the review *miftah al-hisab* published by the ATSM.



In 2007, a Tunisian Association of Didactic of Mathematics ATDM was created to structure the emerging community and ensure the dissemination of research in didactics of mathematics.



Several Tunisians researchers have contributed to the edition of the new master in didactics of mathematics which was set-up in October 2015, aiming to be innovative and open to the international community.

*As a conclusion
with Tunisians researchers experience.....*

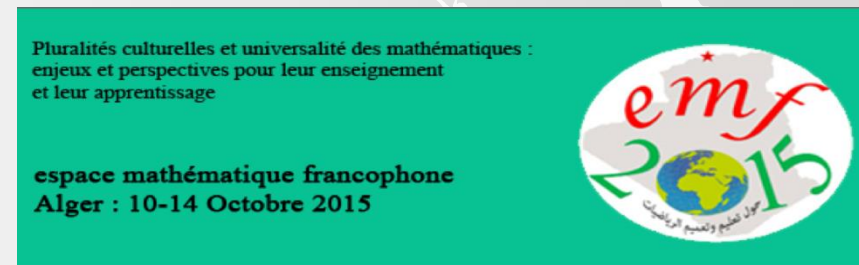
More than fifteen years after the first implementation of doctoral training into didactics of mathematics in Tunisia, the Tunisian community has developed original research questions, whose works irrigate in return the French didactics and contribute to radiation didactics of mathematics in the francophone mathematical space.

In the medium term, all criteria are favorable to the commitment of some members of this community to complete and finish their work in a way allowing them to be institutionally authorized to supervise doctoral research. This will open as perspective the possibility of creating a research group in mathematics education.

.....with my own experience



- ❖ Publications in proceedings: ICME10; CERME8; EMF (EMF2003, EMF2006, EMF2012 and EMF2015) and EEDM since 2001.



- ❖ Member of the Editorial Committee of the journal *Petit x* since 2012.





ICME13
Hamburg 2016

- ❖ Member of the scientific committee of the congress EMF2015
- ❖ Member of the executive board of EMF since October 2015.
- ❖ Member of the Scientific Committee of the 14th EEDDM in 2007, and 19th EEDDM to be held in Paris in 2017
- ❖ Member of the scientific committee of the first conference INDRUM in 2016.



In the current congress  **ICME13**, I am invited to give a lecture.

Hamburg 2016