## ICHM co-sponsored Conference

## **Mathematical Communities in the Reconstruction after the Great War (1918-1928)**

Luminy (Marseilles, France), 12-16 November 2018

The conference was organised by Tom Archibald (Simon Fraser University, Vancouver, Canada), Angelo Guerraggio (Università Bocconi, Milano), Laurent Mazliak (Université Sorbonne, Paris), Rossana Tazzioli (Université de Lille) and had 52 registered participants, and 31 speakers.

November 2018 commemorated the centennial of the end of the Great War. The aim of the conference was to study the deep changes, but also the continuities, that took place in mathematical communities in the aftermath of the war. The conference emphasized how the period that opened in 1918, extending from the Armistice of 11 November 1918 to the International Congress of Mathematicians held in Bologna in 1928 – marking the first time that mathematicians from all countries could once again participate in an international conference – was significant for mathematical life. One original feature of the conference was its study of mathematics in places that are still too little investigated by historians of mathematics, such as Central and Eastern Europe.

The conference was organized around three main themes: Disciplines, Territories and International Organizations, which overlap in some cases. Functional analysis in 1920s Poland, for example, naturally falls under the category of "Disciplines", as it was a new mathematical topic at the time. It also fits, however, under the heading of "Territories", as Poland was declared an independent state after the war.

For a more in-depth look at the evolution of mathematical ideas during the period, we scheduled two half days devoted to more technical disciplinary aspects. Given their rapid expansion in the 1920s, we chose topology and the mathematics of randomness as the topics of these half-day sessions. Finally, to complete the picture, we invited the Cournot Centre to organize a half-day session devoted to the transformations that took place in mathematical economics during the interwar period. Moreover, on Wednesday 14 November afternoon, two special conferences (by historians Anne Rasmussen and Yvan Gastaut) were organized in the Lycée Thiers in Marseille.

## PROGRAM OF THE CONFERENCE

MORNING	AFTERNOON
Territories	Disciplines
8.45 – 9.15 General Introduction	14.00 – 14.45 <b>Tom Archibald</b> (Vancouver) Research Values in Analysis : the work of Otton Nikodym
9.15-10.00 João Caramalho Domingues (Minho) Mathematics in	
post-WWI Portugal: attempts at internationalization	14.45 – 15.30 <b>Frédéric Brechenmacher</b> (Palaiseau) The matrix of mathematical standardization
10.00-10.45 <b>Katalin Gostonyi</b> (Budapest) : Leopold Fejér and the	
emergence of the Hungarian Mathematical Culture	PAUSE
PAUSE	16.00 – 16.45 <b>Frédéric Jaëck</b> (Paris) A look at Banach's work through his publications in the two journals: Fundamenta Mathematicae and Studia
11.00-11.45 <b>- Helena Durnova</b> (Brno) Vaclov Hlavati and mathematics in Prague	Mathematica
	16.45 – 17.30 <b>Martina Schiavon</b> (Nancy): Revaluation of topography after
11.45 – 12.30 <b>Roman Murawski</b> (Poznan) Mathematical foundations and	WW1 and the creation of the Geodetic Union
	Territories  8.45 – 9.15 General Introduction  9.15-10.00 João Caramalho Domingues (Minho) Mathematics in post-WWI Portugal: attempts at internationalization  10.00-10.45 Katalin Gostonyi (Budapest): Leopold Fejér and the emergence of the Hungarian Mathematical Culture  PAUSE  11.00-11.45 - Helena Durnova (Brno) Vaclov Hlavati and mathematics in Prague

Tuesday	Disciplines	Organisations
	9.00 – 9.45 <b>Miroslav Husek</b> (Prague) : Development of topology in 1918-1928, mainly in Russia	14.30- 15.15 <b>Laura Turner</b> (Monmouth) ``A glorious opportunity to benefit mankind": Mathematical projects and perspectives in postwar America
	9.45 – 10.30 <b>Dikran Dikranjan</b> (Udine) The Polish School of topology in 1918-1928	15.15- 16.30 <b>Giovanni Paoloni</b> (Rome) Vito Volterra's commitment in the scientific politics of the 1920s
	PAUSE	PAUSE
	Organisations  11.00 – 11.45 <b>Guillermo Curbera Costello</b> (Sevilla) The first decade of the International Mathematical Union	17.00 – 17.45 <b>Reinhard Siegmund-Schultze</b> (Kristiansand) Richard von Mises Institute for applied mathematics in Berlin, his journal ZAMM and the society GAMM as new developments in German mathematics from about 1920
		21h00: CONCERT (Cannes String Quartet)
Wednesday	Mathematical Economics after WWI (with the support of the Cournot Centre, coordinated by Pierre-Charles Pradier, Paris)	Conférence Grand Public au Lycée Thiers (16h00-18h00)
	9.15 – 10.00 <b>Michel Armatte</b> (Paris): Economic Cycles: From Descriptive Statistics to Formalization	Anne Rasmussen (Strasbourg) : L'internationalisme scientifique
	10.00 – 10.45 <b>Irina Konovalova-Peaucelle</b> (Paris): Was the Russian Theory of Cycles a Mathematical Theory?	Yvan Gastaut (Nice) : Phénomènes migratoires après la Première Guerre mondiale
	PAUSE	
	11.00 – 11.45 <b>Pierre-Charles Pradier</b> (Paris): Were the Foundations of <i>Measurement without Theory</i> laid in the 1920s?	
	11.45 – 12.15 Round table, chaired by Jean-Philippe Touffut (Paris)	

Thursday	Disciplinary half-day Mathematics of randomness [coordinated by Rémi Catellier, Nice]	Territories 14.30 – 15.15 <b>Alexander Karp</b> (New-York): In the Struggle for Red Integrals (On Several Figures in Post-Revolutionary Russian Mathematics Education
	9.00 – 9.45 <b>Patricia Reynaud-Bouret</b> (Nice) Small stories around statistical testing	15.15 – 16.00 <b>Jan Kotulek</b> (Ostrava): Emil Schoenbaum and the reconstruction of Social Insurance in Czechoslovakia after the Great War
	9.45 – 10.30 <b>Hans Fischer</b> (Eichstätt-Ingolstadt). Richard von Mises's "Grundlagen der Wahrscheinlichkeits- rechnung" (1919)	16.00 – 16.30 <b>Raphaël Prunier</b> (Paris) The circulation of ideas in 1920s mathematical statistics.
	PAUSE	PAUSE
	10.45 – 11.30 <b>Alexandre Gaudillière</b> (Aix-Marseille) On Limit theorems of probability theory in the 1920s.	17.00- 17.30 <b>Lukas Verburgt</b> (Utrecht) A Bolshevik menace: Brouwer's reception from Cambridge to Moscow in the 1920s.
	11.30 – 12.15 <b>Rémi Catellier</b> (Nice) The dawn of the Wiener measure	17.30 – 18.15 <b>Laurent Mazliak</b> (Paris) Kyrill Popov and ballistics
		20.00 : « BOULLAIBAISSE » (the famous Marseille fish dinner)
Friday	Organisations/Disciplines	Organisations
	9.00 – 9.45 <b>Antonietta Demuro</b> (Lille) The Institut de Mécanique des Fluides in Lille and the status of hydrodynamics in France in the inter-war period	14.00 – 14.45 <b>Hélène Gispert</b> (Paris) The journal <i>L'Enseignement Mathématique</i> and its internationalist ambitions in the 1920s.
	9.45 – 10.30 <b>Matthias Cléry</b> (Paris) Borel and the foundation of the Institut Henri Poincaré	14. 45 – 15.30 <b>Livia Giacardi</b> (Turin), Rossana Tazzioli (Lille) The foundation of the Unione Matematica Italiana (1918-1928)
	PAUSE	15.30 – 16.30 Final discussion
	10.30 – 11.15 <b>Loic Petitgirard</b> (Paris) . Mathematics for nonlinear oscillations in the 1920s. The example of N. Minorsky's work	End of the conference
	11.15 – 12.00 <b>Tilman Sauer</b> (Mainz) Einstein, relativity and its influence on mathematics	For those who stay until Saturday, please observe that the check-out time is 9.00

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