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Nota di contenuto	Introduction. The Didactics of Mathematics: Approaches and Issues. A Hommage to Michèle Artigue. Bernard R. Hodgson, Alain Kuzniak, J.B. Lagrange -- Chapter 1: Didactique goes travelling: Its actual and potential articulations with other traditions of research on the learning and teaching of mathematics. Abraham Arcavi, Paolo Boero, Jeremy Kilpatrick, Luis Radford, Tommy Dreyfus, Kenneth, Ruthven -- Chapter 2: Networking different theoretical perspectives. Ivy Kidron, Angelika Bikner-Ahsbahs -- Chapter 3: Three perspectives on the issue of theoretical diversity. 3.1. The richness of didactic theories and their networking for a multidimensional approach of didactic phenomena Brigitte Gruegon-Allys, 3.2. Hybridization of theories: The case of the Onto-semiotic Approach and the French Didactics, Juan Godino, 3.3. Social perspective of the multiplicity of theories and the search for connections in the didactics of mathematics, Corine Castela -- Chapter 4: Conversion, change, transitions in research about analysis. Asuman Oktaç, Laurent Vivier -- Chapter 5: Digital tools and mathematics education. 5.1 Core ideas and Key dimensions: Michèle Artigue's theoretical work on digital tools and its impact on mathematics education. Carolyn Kieran, Paul Drijvers. 5.2 The teacher perspective in mathematics education research: a long and slow journey still. Maha

Abboud-Blanchard -- Chapter 6: History of Science, Epistemology and Mathematics Education Research. Renaud Chorlay, Cécile de Hosson -- Chapter 7: Inquiry-based education (IBE): towards an analyzing tool to characterize and analyze inquiry processes in mathematics and natural sciences. Cécile Ouvrier-Buffet, Robin Bosdeveix, Cécile de Hosson -- Chapter 8: The Researcher in the Wider Community. Jill Adler, Celia Hoyles, Jean-Pierre Kahane, Jean-Baptiste Lagrange -- Chapter 9: Preparing young researchers in mathematics education: beyond mere supervising. Ferdinando Arzarello, Mariam Haspekian, Rudolf Straesser -- Epilogue: A Didactic Adventure. Michèle Artigue. .

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#### Sommario/riassunto

This book, the outcome of a conference organised in 2012 in Paris as a homage to Michèle Artigue, is based on the main components of this event. However, it offers more than a mere reflection of the conference in itself, as various well-known researchers from the field have been invited to summarize the main topics where the importance of Artigue's contribution is unquestionable. Her multiple interest areas, as a researcher involved in a wider community, give to this volume its unique flavour of diversity. Michèle Artigue (ICMI 2013 Felix Klein Award, CIAEM 2015 Luis Santaló Award) is without doubt one of the most influential researchers nowadays in the field of didactics of mathematics. This influence rests both on the quality of her research and on her constant contribution, since the early 1970s, to the development of the teaching and learning of mathematics. Observing her exemplary professional history, one can witness the emergence, the development, and the main issues of didactics of mathematics as a specific research field.

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