Record Nr. UNINA9910161650703321 Autore Bikner-Ahsbahs Angelika Titolo Theories in and of Mathematics Education [[electronic resource]]: Theory Strands in German Speaking Countries / / by Angelika Bikner-Ahsbahs, Andreas Vohns, Oliver Schmitt, Regina Bruder, Willi Dörfler Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 3-319-42589-7 **ISBN** Edizione [1st ed. 2016.] 1 online resource (VI, 51 p. 10 illus.) Descrizione fisica Collana ICME-13 Topical Surveys, , 2366-5947 370 Disciplina Soggetti Mathematics—Study and teaching Learning Instruction Semiotics **Mathematics Education** Learning & Instruction Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Main Topics You Can Find in this "ICME-13 Topical Survey" --Nota di contenuto Introduction -- Survey on the State-of-the-art -- Summary and Looking Ahead. This survey provides an overview of German meta-discourse on Sommario/riassunto theories and mathematics education as a scientific discipline, from the 1970s to the 1990s. Two theory strands are offered: a semiotic view related to Peirce and Wittgenstein (presented by Willibald Dörfler), and the theory of learning activity by Joachim Lompscher (presented by Regina Bruder and Oliver Schmitt). By networking the two theoretical approaches in a case study of learning fractions, it clarifies the nature of the two theories, how they can be related to inform practice and renew TME-issues for mathematics education as a scientific discipline. Hans-Georg Steiner initiated the first of five international conferences

on Theories of Mathematics Education (TME) to advance the founding of

mathematics education as a scientific discipline, and subsequently

German researchers have continued to focus on TME topics but within various theory strands.