Record Nr. UNINA9910254273503321 Autore Walczak Szymon M Titolo Metric diffusion along foliations / / by Szymon M. Walczak Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 3-319-57517-1 **ISBN** Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XI, 55 p. 19 illus.) Collana SpringerBriefs in Mathematics, , 2191-8198 Disciplina 516.373 Soggetti **Topology** Differential geometry Differential Geometry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Wasserstein distance -- 2. Foliations and heat diffusion -- 3. Compact foliations -- 4. Metric diffusion -- 5. Metric diffusion for noncompact foliations. Up-to-date research in metric diffusion along compact foliations is Sommario/riassunto presented in this book. Beginning with fundamentals from the optimal transportation theory and the theory of foliations; this book moves on to cover Wasserstein distance, Kantorovich Duality Theorem, and the metrization of the weak topology by the Wasserstein distance. Metric diffusion is defined, the topology of the metric space is studied and the limits of diffused metrics along compact foliations are discussed. Essentials on foliations, holonomy, heat diffusion, and compact foliations are detailed and vital technical lemmas are proved to aide understanding. Graduate students and researchers in geometry, topology and dynamics of foliations and laminations will find this supplement useful as it presents facts about the metric diffusion along non-compact foliation and provides a full description of the limit for

metrics diffused along foliation with at least one compact leaf on the

two dimensions.