1. Record Nr. UNINA9910300109703321 Autore McCoy Robert A Titolo Function spaces with uniform, fine and graph topologies // by Robert A. McCoy, Subiman Kundu, Varun Jindal Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, [2018] **ISBN** 9783319770543 3-319-77054-3 Descrizione fisica 1 online resource (121 pages) SpringerBriefs in Mathematics, , 2191-8198 Collana Disciplina 515.73 Soggetti **Topology** Topologia Espais topològics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface -- Introduction -- 1 Preliminaries -- 2 Metrizability and Completeness Properties of C (X, Y) for = d, f, g -- 3 Cardinal Functions and Countability Properties -- 4 Connectedness and Path Connectedness of C(X, Y) for a Normed Linear Space Y, where = d, f, g. - 5 Compactness in C (X, Y) for = d, f, g. - 6 Spaces of Homeomorphisms -- Bibliography -- List of Symbols -- Index. Sommario/riassunto This book presents a comprehensive account of the theory of spaces of continuous functions under uniform, fine and graph topologies. Besides giving full details of known results, an attempt is made to give generalizations wherever possible, enriching the existing literature. The goal of this monograph is to provide an extensive study of the uniform, fine and graph topologies on the space C(X,Y) of all continuous functions from a Tychonoff space X to a metric space (Y,d); and the uniform and fine topologies on the space H(X) of all selfhomeomorphisms on a metric space (X,d). The subject matter of this monograph is significant from the theoretical viewpoint, but also has

applications in areas such as analysis, approximation theory and differential topology. Written in an accessible style, this book will be of interest to researchers as well as graduate students in this vibrant

research area.