1. Record Nr. UNINA9910151937003321 Autore del Barrio Eustasio **Titolo** Lectures on Empirical Processes [[electronic resource]]: Theory and Statistical Applications / / Eustasio del Barrio, Paul Deheuvels, Sara van de Geer Pubbl/distr/stampa Zuerich, Switzerland, : European Mathematical Society Publishing House, 2007 3-03719-527-4 **ISBN** Descrizione fisica 1 online resource (263 pages) Collana EMS Series of Lectures in Mathematics (ELM); , 2523-5176 Classificazione 60-xx62-xx Soggetti Probability & statistics **Stochastics** Probability theory and stochastic processes Statistics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The theory of empirical processes constitutes the mathematical toolbox of asymptotic statistics. Its growth was accelerated by the 1950s work on the Functional Central Limit Theorem and the Invariance Principle. The theory has developed in parallel with statistical methodologies, and has been successfully applied to a large diversity of problems related to the asymptotic behaviour of statistical procedures. The three sets of lecture notes in the book offer a wide panorama of contemporary empirical processes theory. Techniques are developed in the framework of probability in Banach spaces, Hungarian-style strong approximations, using tools from general stochastic process theory. Other tools appear in this text in connection with historical as well as modern applications, such as goodness-of-fit tests, density estimation or general M-estimators. This book gives an excellent overview of the broad scope of the theory of empirical processes. It will be an invaluable aid for students and researchers interested in an advanced

and well-documented approach to the selected topics.