Record Nr. UNINA9910304142603321 Autore Will Thorsten Titolo Predicting Transcription Factor Complexes: A Novel Approach to Data Integration in Systems Biology / / by Thorsten Will Pubbl/distr/stampa Wiesbaden:.: Springer Fachmedien Wiesbaden:.: Imprint: Springer Spektrum, , 2015 **ISBN** 3-658-08269-0 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (155 p.) Collana BestMasters, , 2625-3577 Disciplina 570 570.285 570285 Soggetti **Bioinformatics Bioinformatics** Computational biology **Biomathematics** Computer Appl. in Life Sciences Mathematical and Computational Biology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Protein Complex Prediction -- Protein-Protein Interaction Networks --Nota di contenuto Domain-Domain Interaction Networks -- Combinatorial Algorithms --Algorithm Engineering. Sommario/riassunto In his master thesis Thorsten Will proposes the substantial information content of protein complexes involving transcription factors in the context of gene regulatory networks, designs the first computational approaches to predict such complexes as well as their regulatory function and verifies the practicability using data of the well-studied yeast S.cereviseae. The novel insights offer extensive capabilities towards a better understanding of the combinatorial control driving transcriptional regulation. Contents Protein Complex Prediction Protein-Protein Interaction Networks Domain-Domain Interaction

> Networks Combinatorial Algorithms Algorithm Engineering Target Groups Computational biologists and biologists working with gene regulatory networks Computer scientists interested in biological

issues The Author Currently, the author is pursuing his Ph.D. at the Center for Bioinformatics in Saarbrücken, Germany. .