

Networks in Biology – From Identification, Analysis to Interpretation

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Abstract. Over the last decade networks has become a unifying language in biology. Yet we are only in the beginning of understanding their significance for biology and their medical applications. I will talk about the diversity of biological networks composed either of genes, proteins, metabolites, or cells and the associated methods for finding these graphs in the data. Next I will provide an overview of different methods of analysis and what kind of insights that have been obtained. During the talk I will highlight current challenging problems requiring computational skills with respect to identification, analysis, algorithms, visualization and software.