CB-EL5: Network Biology and Graph Theory

Person in charge and Representative	Kacprowski
Contact person	Ute Zeisberg <ute.zeisberg@plri.de>
Semester	2
Topic cluster	Computational biology
Duration/Credit	TBD
Time	The exact date incl. time will be announced separately
Place	Online. Dial-in data are sent separately
Prerequisite for the lecture	Python / R programming - Basic Knowledge of Molecular Biology
Aim of the lecture	Students will learn the basics of graph theory and how graphs are used to model biological networks. This course will introduce versatile graph analysis libraries as well as common databases for biological networks of various kinds. After successful completion of this course, the students will be able to construct graphs to model molecular data, retrieve biological networks from various databases, and perform basic graph analyses to derive systems level insights from graphically represented molecular data.