

Algorithms in Genome Research

Winter 2015/2016

Exercises

Number 6, Discussion: 2015 December 18

1. What is a Petri Net? Find examples of Petri Net applications in Systems Biology.
2. Find out which peak detection algorithms exist that may be used in the analysis of GC-MS and GCxGC-MS experiments. How do they work? Discuss the pros and cons.
3. Consider the mass decomposition algorithm that we discussed in proteomics, in order to calculate all compomers for a given parent mass. Which additional effects do we have to consider when we apply this to metabolites?