

## **PhD position I: Modeling of the thylakoid membrane**

**Place:** Molecular Dynamics Group, University of Groningen

**Promotor:** Prof. S.J. Marrink

**Duration:** 4 years

**Start:** 2011

**Applications:** email CV to [s.j.marrink@rug.nl](mailto:s.j.marrink@rug.nl)

**Requirements:** a solid background in biophysics

### **Description:**

In collaboration with our experimental partners, the aim of this project is to construct a realistic in-silico model of the thylakoid membrane. The thylakoid membrane consists of a large photosynthetic protein complex embedded in a membrane enriched in galactolipids. Nobody knows the detailed organization of this complex, which is the power plant of plant cells, converting light into chemical energy.

Simulation studies will be performed on different levels of resolution, and involve multi-level parameterization, large-scale self-assembly and the use of the latest hybrid simulation methodologies.