



## Dr. Helmut Kirchhoff

The Meaning of Structural Dynamics in Photosynthetic Thylakoid Membranes: From Molecules to Membranes

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HOST: DR. MARINUS PILON

TUESDAY, SEPTEMBER 19, 2017  
Biology Auditorium Rm. 136 @ 4:00pm  
Pre-Seminar Mixer in the Biology SW Lobby @ 3:30pm

### THE MEANING OF STRUCTURAL DYNAMICS IN PHOTOSYNTHETIC THYLAKOID MEMBRANES: FROM MOLECULES TO MEMBRANES

In plants, photosynthetic energy conversion is confined to the thylakoid membrane system inside chloroplasts. The complex architecture of this membrane is characterized by strict stacking of part of the membranes to grana thylakoids fascinating researchers for over a half century. However, the functional meaning of grana stacking remains a mystery. Our work focusses on structural dynamics of this unique membrane system that ranges from the micrometer (entire membrane system) to the nanometer (molecular) level. This talk will present recent findings on architectural dynamics of thylakoid membranes triggered by environmental changes. The functional meaning of these structural dynamics for photosynthetic energy conversion will be discussed.