

**PHYSICAL COLLOQUIUM  
INVITATION**

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Monday, 11.06.2018, 4.15 p.m., W2-1-148

speaks

**Prof. Dr. Stefan C. J. Merskers,**

**University of Eindhoven,**

**The Netherlands**

about

**“Spectroscopy with circularly polarized light:**

**What, How and Why?”**

Circularly polarized light provides a unique tool to study chiral molecules and materials. In this lecture I will first briefly address the nature of circularly polarized light and instrumentation for its detection. On the molecular scale, circularly polarized light can probe the dynamic delocalization of photoexcitations in aggregates of dye molecules. In materials, circularly polarized light allows one to detect helical molecular organization in thin films of chiral conjugated polymer. On a deeper level, differences in the interaction between left and right circularly polarized light and matter arise from a non-local response to light. Our current understanding of this non-locality of the light-matter interaction is highly problematic and will be discussed in the last part of the lecture as an open ended question.

All interested persons are cordially invited.

Sgd. Prof. Dr. Manuela Schiek