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## Dr. Lior Eshdat

Department of Chemistry and Biochemistry  
University of Colorado at Boulder

### **NMR Goes Bananas: a Solid State NMR Study of the Liquid Crystal NOBOW**

*Abstract:* NOBOW was the first banana-shaped mesogen exhibiting a chiral smectic conglomerate made of achiral molecules. Although NOBOW and other derivatives have been the focus of intensive research over the past decade, several questions still remain. How does the splitting of the carbonyl signal, reported for the B<sub>4</sub> phase, correlate with the C<sub>2v</sub> symmetry of the molecule? Does this explain the chirality of the B<sub>2</sub> phase? Is the B<sub>4</sub> phase a liquid crystal or a solid? What are the molecular dynamics in NOBOW's phases? New solid-state NMR investigations of NOBOW shed light on these questions, while raising several new ones.

**Wednesday, March 30 at 2:30 p.m.  
Duane Physics 11<sup>th</sup> Floor Commons Room**



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