

## **OSCAR: An Interactive Bioinformatics Tool for Sequencing Oligosaccharides**

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Refreshments at 2:30, Talk from 3:00-4:00

OSCAR seeks to determine the structure of oligosaccharides using data derived from sequential mass spectrometry (MSn). Oligosaccharides are small trees of connected sugars such as glucose. Previous biomolecule-sequencing algorithms have operated on linear polymers such as proteins or DNA but, because oligosaccharides can form complicated branching structures, new approaches are required. This talk will provide a brief description of the chemistry of oligosaccharides, provide a conceptual mapping from oligosaccharides to standard Computer Science data structures, and discuss and demonstrate the sequencing algorithm itself.