

 ST. OLAF PHYSICS DEPARTMENT

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# COLLOQUIUM SERIES

## RADIATION MODELING AT HYPERSONIC SPEEDS

**Sara Swenson**  
**Aerospace Engineering and**  
**Multiphysics Simulation**  
**(AEMS) Research Group,**  
**University of Colorado**  
**Boulder.**

**Wednesday, April 5**

**3:00-4:00PM**

**RNS 210 or Zoom**



Hypersonic vehicles, characterized as traveling faster than Mach 5, span a variety of research interests in the aerospace community, from hypersonic weapons to reentry vehicles returning from space travel. However, travel at these high speeds leads to chemical and physical phenomenon which produce high temperatures and pose interesting modeling and engineering challenges. This session will summarize some of those challenges and go into detail on the role that radiation plays in hypersonic environments.