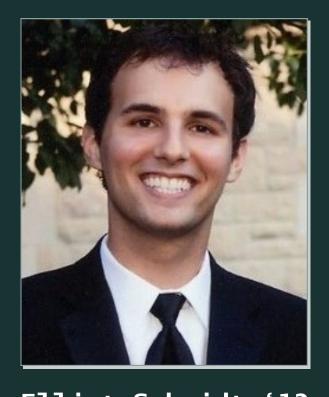
## Physics Colloquium

Materials Science:
A great career path for the budding physicist or chemist



Elliot Schmidt '12
University of Minnesota
Ph.D. Candidate
Chemical Engineering &
Materials Science

Wednesday, April 20 2:00 pm RNS 210 Refreshments served!

A two part talk will be presented. The first half of the talk will describe what Materials Science is and the many fields of study it encompasses. Possible career paths available to someone with an advanced degree in Materials Science will be discussed in addition to suggested coursework and preparatory advice for those interested in pursuing an advanced degree in Materials Science. The second half of the talk focuses on ionic liquid gating, my specific area of research within Materials Science. Ionic liquids are molten salts at room temperature. This unique property allows capacitors using an ionic liquid "dielectric" to reach high capacitance values on the order of  $\mu F/cm^2$ . A characterization of the electric double layer formation dynamics of a metalionic liquid-metal structure will be presented.