

# SEMINAR IN PHYSICS

FRIDAY, FEBRUARY 14

3:30-4:45 – ROSS 0220

REFRESHMENTS

## **Street and Infrastructure Maintenance (SIM) in Greeley and Abroad: The Road Ahead**

**John Wood (UNC Physics student)**

Our city's roadways are in a never-ending cycle of degradation, repair, and innovation. It may surprise some people to learn of the enormous effort required to keep the streets drivable. Great strides in concrete/asphalt technology have been made in the past decade, and many new ideas promise greater longevity, durability, safety, and affordability on the road. Though the wheels of government do turn slowly, the implementation of new technologies has already afforded us a higher standard of roadway.

## **DNA and Dots**

**Casey Rogers (UNC Physics student)**

In 2006, Paul Rothemund developed a programmable method for building DNA origami. Since then, scientists have been using DNA origami templates for research in nanoscience. Applications include nano-circuitry, bio-sensors, and photovoltaics. See how quantum dots can be linked to DNA origami and applied to these cutting-edge topics.