#### CALTEACH AT UC MERCED

# STEM Webinar Sessions July Sessions July 17th, 2020

2020 BOBCAT SUMMER STEM ACADEMY VIRTUAL EDITION



#### Presenter: Dr. David Strubbe

## Light, Atoms, and Crystals: How to Use Physics to Make a Better Solar Panel

"Never trust an atom – they make up everything!" Everything we see around us is made up of atoms, and the way atoms are arranged in a material tell us a lot about the material's properties. Prof. David Strubbe will demonstrate with lasers, holograms, and almond trees how we figure out the atomic structure of materials, which is the starting point for using physics to understand and design new materials. He will discuss his research on materials for solar panels, and also demonstrate another kind of renewable energy source: thermoelectricity, in which heat can create electricity.

#### **About the Presenter:**

I am an assistant professor of physics at UC Merced. Since coming to Merced 4 years ago, I have been teaching introductory physics to freshman students, as well as more advanced classes. My research is focused on using computers to understand the materials used in solar cells, with goal of improving the cost and efficiency of solar panels.

### Who is the webinar session open to

Middle School, 9th-12th (High School), Teacher, Community members, Undergrads

#### When is the session:

• July 17th: 3pm to 4pm

#### How can you register?

#### **Zoom Registration Link Below:**

https://ucmerced.zoom.us/meeting/register/tJclc-GhqD0pGNIHW8ghls2BmrXobtpfu88b