## APPLIED MATH SPOTLIGHT

## TANYA TAFOLLA

My research focuses on high performance computing and numerical methods for atmospheric modeling. The evolution of the atmosphere can be seen as an initial value problem, where given initial observations and governing equations, a realistic representation of the atmosphere can be computed. However, trustworthy forecasts require not only accurate physics, but efficient and accurate time integrators. I work on developing time integrators for the Euler equations, specifically focusing on the efficiency of the scheme and improving parallel performance of exponential integrators via communication avoiding algorithms.

## **About Me**

- I enjoy playing and watching tennis. My favorite players at the moment are Naomi Osaka, Coco Gauff, Aryna Sabalenka and Maria Sakkari.
- I am a huge *Souls* fan, and enjoy playing anything from FromSoftware.
- My favorite bird sound is a turkey gobble.

## GRADUATE STUDENT









