

Bi-State Math Colloquium

Who: Camille Felton

When: Thursday, November 9, 4:00 pm

Where: Ottensman 122, UW-Platteville

Limiters for Lax-Wendroff Discontinuous Galerkin Methods

Many times when we learn something new in math, we wonder how these concepts could be applied in the real world. In this talk, I will share a practical application of differential equations and numerical analysis, hyperbolic partial differential equations. These equations can be used to display many natural phenomena including tsunamis and the behaviors of gases. However, when you try to estimate solutions to these hyperbolic systems using higher order numerical methods, oscillations occur. Through this project, my group members and I created limiters that reduced oscillations while keeping accuracy.

Camille Felton is a senior at UW-Platteville with a major in Mathematics and a minor in Spanish. She will graduate in the spring and plans to go to graduate school, with the ultimate goal of becoming a math professor someday. Campus activities she is involved in include Math club, Track and Field, and Cross Country.