

Physics Department Seminar

11 am February 23, 2024, Science Building Room 250



Zoom link

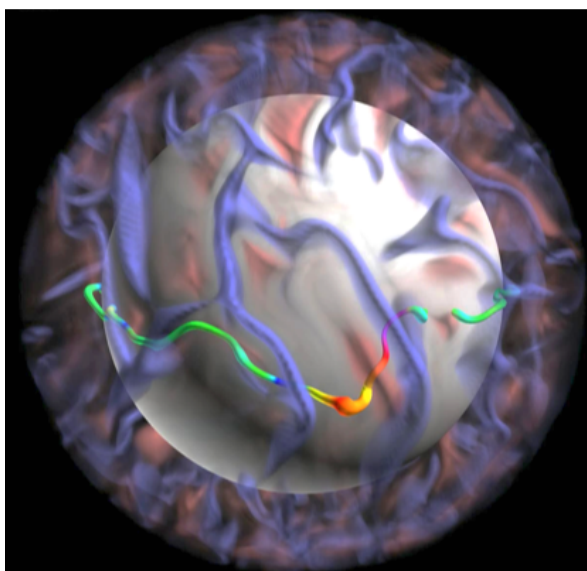
From Sunspots to Okranauts: Adventures in stellar magnetism and STEM outreach

Dr. Maria Weber

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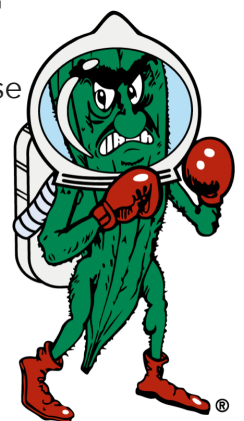
There are still many unknowns about our nearest stellar companion, the Sun. To most it is a predictable, unchanging sphere. But to an astronomer, it is a chaotic mass of tangled magnetism. This seminar will span the worlds of stellar magnetism and communicating astronomy with the public.



Magnetic flux emergence simulation

Starspots are manifestations of a star's internal magnetic processes. However, there are still many uncertainties about the complex mechanisms that give our own Sun its spots. Within the context of magnetic flux emergence in the Sun, I will discuss what we know and what we don't about how active region magnetism is generated and rises through stellar interiors to produce starspot observables.

But as much as I enjoy studying stars, I love telling people about it more! You don't have to choose between your science and your outreach, you can create a career where you do both. I'll also talk about my role as a planetarium director in the underserved Mississippi Delta and our outreach mascot, the Okranaut.



AstroOrka mascot