

**Faculty Member: Jonathan Crimmins**

**Department: Language and Literature**

**Title of Project: Between Cinema and the Stage: Visual Interplay in Experimental Theater and Film, 1980-2020.**

*Between Cinema and the Stage* has a twofold purpose: to fund work on a new book project about the relationship between cinema and theater; and to support the development of cinema studies curricula at The University of Virginia's College at Wise. In the later twentieth and early twenty-first centuries, the influence of cinema becomes especially visible in experimental theater as filmic effects become feasible for modestly budgeted performances. During the same period, cinema looked to theater to estrange its traditional focus on naturalistic performances and narratives. The book project will examine the interplay between film and cinema to determine how such a focus shifts our interpretative claims about these media forms and their historical period. The project will also support a faculty workgroup that will focus on helping faculty increase their familiarity with teaching cinema. The workgroup will facilitate resource sharing and teaching strategies, with the goal of expanding course offerings in film at UVa Wise.

Faculty Member: Islam Khan

Department: Natural Sciences

Title of Project: Establishing Oscillon Decay in the Early Universe through Kinetic Coupling

Cosmic inflation is a brief period of extremely rapid expansion in the earliest moments of the universe that helps explain several observations in cosmology, including the flatness of the universe and its large-scale uniformity. After inflation, the universe entered the post-inflationary, or reheating, era, during which the energy density driving inflation was converted into ordinary matter and radiation, setting the stage for the radiation-dominated universe. Because this phase cannot be directly observed, theoretical models and numerical simulations are essential for understanding how the early universe evolved toward radiation domination.

An important prediction of the reheating process is the formation of oscillons, which are localized, long-lived lumps of energy that likely dominated the post-inflationary universe. Although oscillons must eventually decay to allow the universe to reach the conditions required for Big Bang nucleosynthesis, a clear physical decay mechanism has remained unresolved, largely due to computational limitations.

Recent collaborative work with Tom Giblin at Kenyon College has identified a previously unknown mechanism for oscillon decay that arises from kinetic coupling between fields. The proposed project builds on this discovery and will investigate the conditions under which oscillons decay through kinetic coupling, with the goal of establishing this mechanism as a robust physical effect. Studying the decay of oscillons driven by kinetic coupling requires extensive numerical analysis, particularly to distinguish genuine physical decay from numerical artifacts. Given the novel nature of this project, it is expected to make a significant contribution to the field of early universe cosmology and lead to peer-reviewed publications.

**Faculty Member: Michael McNulty**

**Department: Visual and Performing Arts**

**Title of Project: Shreds and Patches Theater Project**

The Shreds & Patches Theater Project is intended to produce a professional caliber, touring children's theater production to present publicly and as school programs to the students of Wise, Lee, Dickenson Counties and/or the City of Norton, extending the understandings and impacts of live theater on a community. The project will offer UVA Wise students the opportunity for professional/paid theater apprenticeships, mentored by alumni with professional theater experience. Additionally, public school students will have the opportunity to experience live theater, based on noted children's literature, in the educational context of their own schools, making the arts a living and meaningful experience that extends beyond the limited, mediated, digital exposure to the arts through screens and devices. This project is further intended as a form of positive, applied outreach with the assumption that audiences will associate their experience with UVA Wise as producer, sponsor of the program, and the home to the people and work embodied in the performance. Audiences will also associate their experience with Pro-Art (as the presenter) a non-profit service organization closely associated with and operated out of UVA Wise.