

Justification for Inclusion of Previously Published Co-authored Material in Dissertation

I would like to apply to present previously published material in my dissertation. This material consists of two peer reviewed articles that were included in Physical Review Letters (Chapter 1) and Soft Matter (Chapter 2), and one which has been accepted, but not yet published in the Journal of Statistical Mechanics: Theory and Experiment (Chapter 3). These articles are presented in the chronological order in which they were published, because each one builds on the ideas of the previous one.

Chapter 2 describes my first project studying the Janssen effect in friction-compacted granular systems. Chapter 3 describes my second project studying shock fronts in obstructed granular flows.

Each of these articles was written by me with the help of my advisor Eric Corwin. Professor Corwin provided feedback and gave advice on research directions, but the data, the analysis, and the writing were my own so I am first author on both publications. I have presented this data at a variety of conferences and I am fully confident in stating that this is worthy of being included in my thesis.