

# Irreproducible Results: Potential Pitfalls and Good Practices

Prof. Igor Mazin

Department of Physics and Astronomy  
George Mason University

Friday, September 20, 2024, 3:30pm

Planetary Hall, Room 120

Abstract: This is an ad hoc colloquium, filling a window that we have in our schedule. I will report in a rather informal way about a curious conference I attended, entitled “International Conference on Reproducibility in Condensed Matter Physics”. I will convey some of the points raised at the conference regarding misconduct in physical research, such as dishonest or subconscious data selection, intentional “mis-visualization”, “data massaging”, contrasting differently obtained results as if physically different, and, of course, the most egregious of all, malicious data falsification. I will give a variety of examples from my own experience, and will also describe two major scandals in physics in the last several decades, the Schon scandal and the Dias scandal.