Title: The Emperor's New Crown: What Covid-19 Reveals

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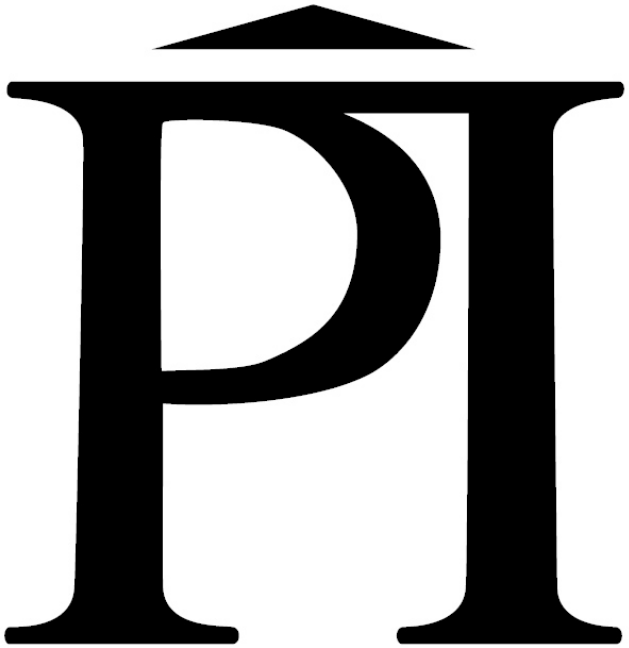
Abstract: As of late March 2020, Covid-19 has already secured its status among the most expansive pandemics of the last century. Covid-19 is caused by a coronavirus--SARS-CoV-2--that causes a severe respiratory disease in a fraction of those infected, and is typified by several important features: ability to infect cells of various kinds, contagiousness prior to the onset of symptoms, and a widely varying experience with disease across patient demographics.

In this seminar, I discuss the many lessons that the scientific community has learned from Covid-19, including insight from molecular evolution, cell biology, and epidemiology. I discuss the role of mathematical and computational modeling efforts in understanding the trajectory of the epidemic, and highlight modern findings and potential research questions at the interface of virology and materials science. I will also introduce areas of inquiry that might be of interest to the physics community.



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