

## **Students' Annual Seminar**

### **Nature of yielding transition in strong and fragile glass-formers under cyclic shear deformation**

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Yielding behaviour in amorphous solids has been investigated in computer simulations using uniform and cyclic shear deformation. Recent results show yielding amplitude changes significantly from poorly annealed to well annealed glass in Kob-Anderson model (fragile glass) but in case of Silica model (strong glass) all have nearly the same yielding amplitude under cyclic shear. This raises a question: does the yielding depend on fragility? To investigate this, we are tuning fragility of two different models (changing pin concentration in Kob-Anderson model and varying density in soft sphere model) and performing athermal quasistatic cyclic shear on both of these models prepared with a wide range of annealing.

***Friday, Mar 24<sup>th</sup> 2023***

***4:00 PM (Tea / Coffee 3.45 PM)***

***Seminar Hall, TIFR-H***