**Sweeping Process Theory for Elastoplastic Behavior of Disordered Hyperuniform Networks**

**Abstract:** Introduce the idea of SPT, emphasize the novel development of the leapfrog methods, summarize the key physical findings of elastoplastic behavior of the networks

**1 Introduction:**

Introduce the significance of elastoplastic networks, existing methods;

discuss SPT framework and its unique aspects;

emphasize the new development of the leapfrog methods that allows one to directly jump to the plasticity events, in contrast to the time-driven approach;

Yang will talk about background of DHU networks and materials.

**2 Sweeping Process Theory**

Present the mathematical formulation of SPT

Present the leapfrog method, illustrate the procedure using the single hexagon example

Present the hexagonal hole in 2D plane example, as verification of the method

**3 Elastoplastic behavior of DHU Networks**

Yang will Introduce the DHU networks, their significances, and briefly mention how they are generated

Present the analysis of the elastoplastic behavior, discuss interesting physics

**4 Conclusions and Discussion**

Point out the current limitation: e.g., small deformation due to linearization, and future plans on development and applications