MICROSCOPIC BUCKLING AS AN ORIGIN OF PECULIAR DYNAMICS OF GLASSES AT THz FREQUENCIES AND BELOW Tsuneyoshi NAKAYAMA,

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Glasses represent a totally dif ferent class of disordered system, showing universal and peculiar dynamic properties at THz frequencies and below. A great deal of experimental works for many types of glasses concerning to their low-energy dynamics have been carried out in terms of spectroscopic measurements such as Raman/Hyper-Raman scattering, infrared absorption, inelastic neutron and x-ray scattering at low energies in addition to thermodynamic, acoustic and dielectric measurements at low temperatures. Though numerous speculations and theories to interpret these features have been proposed over the past years, no satisfactory progress has been made, indicating the complexity as the theoretical problem. This talk will present a physical picture for elucidating the origin of peculiar low-energy dynamics observed at THz frequencies and below.