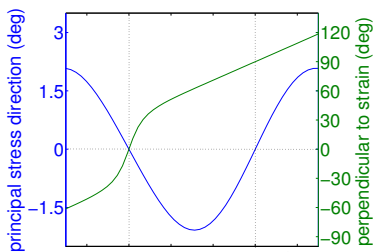

Figure S3: **Fixed points of dynamical stress/strain based feedback updates of anisotropy direction.** For the quadrilateral patch of anisotropic material with constant transverse and longitudinal Young modulus as $Y_T = 400kPa$ and $Y_L = 1200kPa$ respectively and Poisson coefficient = 0.2 under anisotropic loading $F_x = 8kN$ and $F_y = 4kN$ the direction of principal stress and perpendicular to the direction of principal strain are plotted versus the angle of varying anisotropy direction. 0 value for the angles is corresponding with maximal force direction. There is a fixed point at zero for both feedback systems which is stable for stress feedback whereas extremely unstable for the perpendicular to maximal strain feedback.