Evidence-based Interventions to Mitigate Gender Inequity in Physics in India and Fixing the Flawed Meritocracy. PRAJVAL SHASTRI, Indian Institute of Astrophysics (retired) — We consider the common hypotheses put forward to explain the gender gap in physics in India and examine them in the light of the available evidence. Typical hypotheses include the lack of interest in physics among girls, systematically lower innate competence among girls/women, socialisation leading girls to feel incompetent in physics, discriminatory familial responsibilities on women and discrimination within the profession. The evidence do not support the first two hypotheses. Therefore interventions along the lines of a "fixing the women" are not suggested by the evidence. While discriminatory familial responsibilities on women do play a role in creating the gender gap, the evidence strongly suggest that fixing systemic barriers within the enterprise, including in school education is really the way forward. The work of the recently founded Gender in Physics Working Group of the Indian Physics Association have produced tangible results along these lines and will be summarised.