1131-35-35   **Jun Chen*** (`chenjun@sustc.edu.cn`), Department of Mathematics, Southern University of Science and Technology, No 1088,xueyuan Rd., Nanshan District, Shenzhen, Guangdong 518055, Peoples Rep of China. *Stability of transonic flows past a wedge.*

I will talk about the stability of transonic flows past a 2-D wedge governed by the full Euler equations. Given a piecewise constant transonic flow past a straight wedge, if the incoming flow and the wedge are perturbed, there exists a unique subsonic solution in the downstream together with a perturbed shock in between. Corner singularity and asymptotic behavior of the subsonic flow are handled through elliptic estimates using weighted Hölder norms. The analysis discloses the relation between the shock polar and the regularity and asymptotic behavior of the downstream subsonic flow. (Received June 11, 2017)