## **Transonic Shocks and Free Boundary Problems**

## Myoungjean Bae

Northwestern University

My talk will be devoted to introduction of transonic shocks for the Euler system of inviscid compressible flow, and to description of how a transonic shock problem is formulated as a free boundary problem containing nonlinear Mixed type PDEs. I will present various examples of shock phenomena and contact discontinuity along with recent results.