

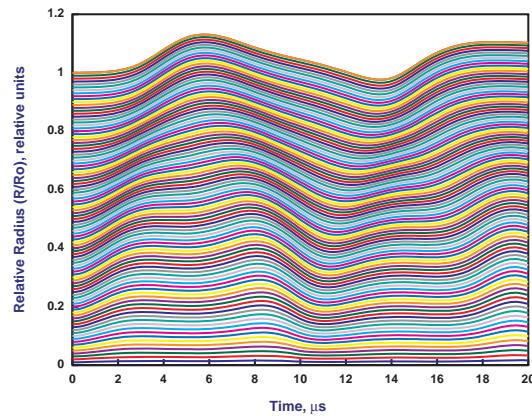
# Liquid Jet Simulation Studies

## (K.T. McDonald, Dec. 6, 1999)

1. HEIGHTS simulation (Ahmed Hassanein, ANL).

- 2-D; can't break free jet up yet.

**Mercury Jet with 4 mm Beam and B-field  
Diffused in**



- Exploding wire studies (Tatiana Burtseva, Efremov Inst.).

2. 3-D simulations (Roman Samulyak, BNL CDIC).

- Can simulate free jet breakup into droplets.

3. Mercury target studies (Rusi Taleyarkhan, ORNL).

- Existing studies of confined Hg targets for SNS.
- Lab tests suggest factor of 4 reduction in velocity of sound in mercury struck by an intense beam pulse.