

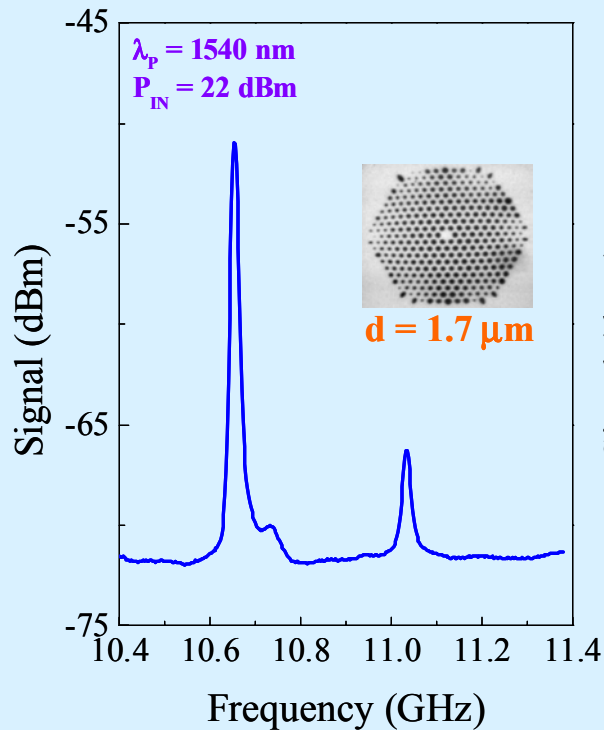
Stimulated Brillouin Scattering in Microstructured Fibers

Radha K. Pattnaik and Jean Toulouse

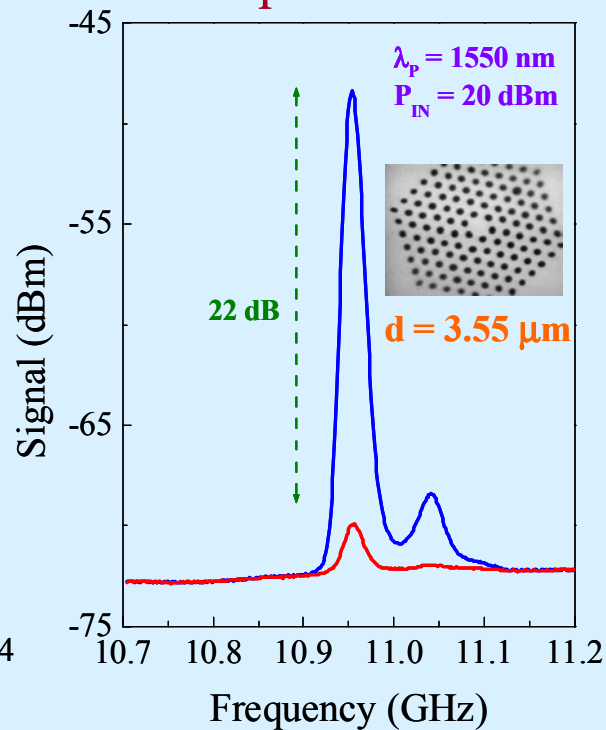
Issues addressed

- SBS in microstructured (MS) fibers.
- Polarization maintaining properties of microstructured (MS) fibers.
- Wavelength dependence of SBS threshold.

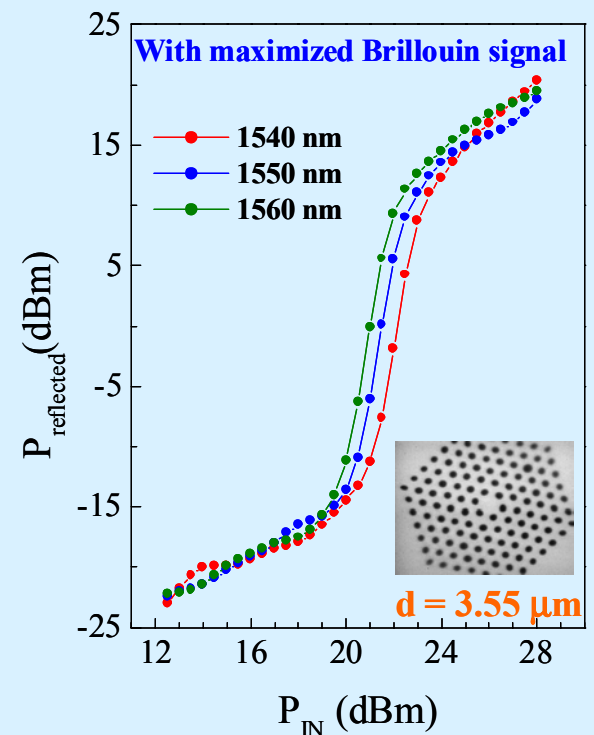
Higher order
acoustic modes ?



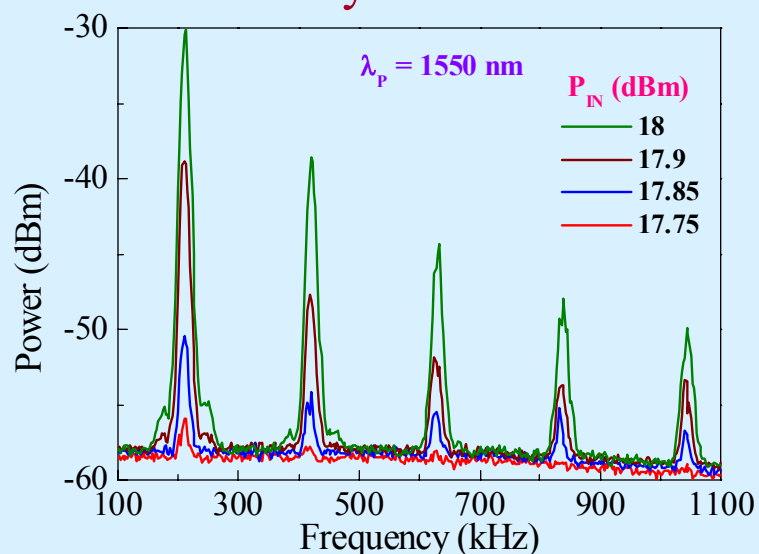
Pump polarization
dependence



Wavelength dependent
SBS threshold

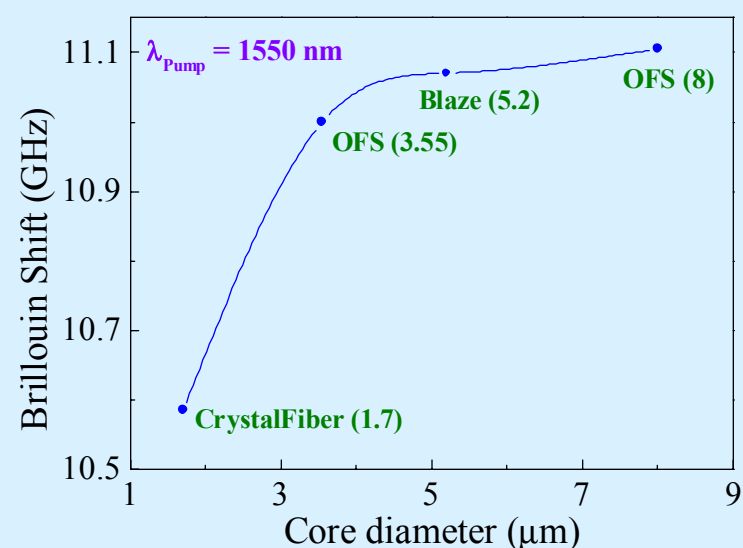


Brillouin laser:
Cavity modes



Evidence of lasing in MS fiber when the pump power exceeds the SBS threshold.

Brillouin shift:
Core diameter dependence



The Brillouin frequency shift decreases as the core diameter decreases.