

# Few ideas for projects: (depends on student's interest & background)

- ★ Population studies of Long / Short GRBs
- ★ Properties of second (pair) photosphere
- ★ ↑ Construct Monte-Carlo simulation of EM cascade following particle acceleration
- ★ Study the properties of X-ray flares: predictions for precursor emission from late-time measurements
- ★ How can one explain the "fast-rise-exponential-decay" (FRED) shape of pulses ?
- ★ Analyze LOFAR data

**Asaf Pe'er;** Room: 1.01c; <http://www.physics.ucc.ie/apeer>