## Lecture Week No. 3



Experimental Lectures	Thermal Noise  Danzmann	Thermal Noise  Danzmann	Quantized Fields Schnabel	Squeezing of light  Schnabel	Optomechanics and QND  Schnabel
Astrophysical Lectures	Universe evolution, observational evidences, GW detectors and their sensitivity  Schutz	Star formation and evolution, including end point: WD, SNe -> NS, BH	Pulsars (isolated and in binaries). Binary evolution: Roche lobe, accreting systems. NS, BH binary populations  Babak	Galactic WD binaries. Formation of Massive BHs: hierarchical formation tree: galaxy mergers. Dynamical friction, "last parsec" problem  Sesana	Massive BH in Milky Way. Extreme mass ratio inspirals. pulsar timing as GW detector. Exotic GW sources: cosmic strings + Amaro Seoane
Project Work	Project work in groups  Experts	Project work in groups  Experts	Project work in groups  Experts	Project work in groups  Experts	Presentations  Experts