- Jing Ping Wang (Kent): Algebraic quantisation of Dynamic Systems

Abstract: In this talk, we discuss a recently emerged approach to the problem of quantisation. In this approach, we switch the focus from deformations of Poisson manifolds to dynamical systems themselves and reformulate the quantisation problem in terms of quantisation ideals. We present our first examples of bi-quantum structures, which reproduce bi-Hamiltonian structures in the classical limits, and first examples of non-deformation quantisation of dynamical systems when the algebra defined by the commutation relations remains noncommutative for any choice of the quantum (Plank-type) constant. This is a joint work with S. Carpentier and A.V. Mikhailov.