Derived Categories of Coherent Sheaves and Phantoms

April 24, 2013

25.04.13 Derived and triangulated categories [GM]; Exceptional collections and semi-orthogonal decompositions in derived categories of coherent sheaves [Bo], [BK], [BO1]

02.05.13 More on $D^b(X)$. In particular: Serre functor; Mutations of exceptional collections [Bo], [BK]

09.05.13 No talk (Christi Himmelfahrt)

16.05.13 Derived categories of projective bundles, blow ups, products [BO1], [Or]

23.05.13 Derived category determines the variety when $K > 0$ or $K < 0$ [BO1], [BO2]; Example of $K = 0$: Dual Abelian varieties are derived equivalent [Mu]

30.05.13 No talk (Fronleichnam)

06.06.13 Hochschild homology and cohomology: HKR theorem, Morita invariance and additivity [Gi], [Ka1], [Ka2], [Kel], [Kuz]

13.06.13 Quasi-phantoms on the Beauville surface [GS]

20.06.13 K-motives and phantoms on product fourfolds [GO]

References


http://imperium.lenin.ru/~kaledin/tokyo/

http://imperium.lenin.ru/~kaledin/seoul/


