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Marton Hablicsek* (hablics@math.wisc.edu), 922 B Eagle hts, Madison, WI 53705, and
Andrei Caldararu and **Dima Arinkin**. *Derived intersections and the Hodge theorem*.

I will present a base change theorem for non-transversal intersections of smooth subvarieties in a smooth variety. As an application I will give a new, algebraic proof of the Hodge decomposition (along the lines of Deligne and Illusie). Similar techniques can also be used to prove a special case of a result of Barannikov-Kontsevich computing the cohomology of the twisted de Rham complexes. This work is joint with Dima Arinkin and Andrei Caldararu. (Received September 17, 2013)