

An introduction to Hodge algebras

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Hodge algebras, also known as algebras with straightening relations, appear as coordinate rings of some interesting algebraic varieties (Grassmannians, determinantal varieties, etc.). To every Hodge algebra one can associate a “discrete” Hodge algebra having a simpler structure, by means of a deformation which preserves many important properties. I will illustrate how to construct such a deformation and some ways of studying properties of the discrete Hodge algebra.