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Aspects de la géométrie algébrique : la postérité mathématique d'Alexander Grothendieck

*Aspects of Algebraic Geometry; the Mathematical Posterity of Grothendieck*

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*Motives and Quantum Cohomology*

Abstract:

Quantum Cohomology endows each (classical) motive of a smooth projective variety with a highly complicated and rich structure: that of an algebra over the modular operad of motives of moduli spaces (of stable pointed curves).

The talk will be dedicated to a discussion of various issues raised by this construction: problems of functoriality; reduction to genus zero; semisimplicity of Quantum Cohomology in genus zero; Quantum Cohomology of moduli spaces themselves.