

Rigid differential equations and motivic systems

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We report on Simons conjecture predicting that over the field of complex numbers, rigid connections (i.e. rigid differential equations) are motivic. If true, this should imply that the p -curvatures of rigid connections are nilpotent, which is what we prove. We tie up to the first lecture explaining the relation with Grothendieck's p -curvature conjecture.

Joint with Michael Groechenig