1086-53-1242   **Sergey Grigorian*** (`sgrigorian@scgp.stonybrook.edu`), Stony Brook University, Stony Brook, NY 11794-3636. *Short time behaviour of a modified Laplacian coflow of G2-structures.*

We modify the Laplacian coflow of co-closed G_2-structures - $\frac{d}{dt}\psi = \Delta\psi$ where ψ is the closed dual 4-form of a G_2-structure φ. The modified flow is now parabolic in the direction of closed forms up to diffeomorphisms. We then prove short time existence and uniqueness of solutions to the modified flow. (Received September 20, 2012)

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