Meeting: 1005, Newark, Delaware, SS 12A, Special Session on Geometric Analysis

1005-53-80 **Hao Fang*** (haofang@ias.edu), School of Mathematics, IAS, Einstein Drive, Princeton, NJ 08540. A multi-particle Moser-Trudinger Inequality.

We prove a conjecture of Gillet-Soule: the determinant of the Laplacian on a line bundle over \mathbb{CP}^1 is always bounded from above. We also point out its relation to the Moser-Trudinger inequality and Szego limit theorem in classical analysis.

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