

’Stability of the elliptic Harnack Inequality’

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Abstract: Following the work of Moser, as well as de Giorgi and Nash, Harnack inequalities have proved to be a powerful tool in PDE as well as in the study of the geometry of spaces. In the early 1990s Grigor’yan and Saloff-Coste gave a characterisation of the parabolic Harnack inequality (PHI).

This characterisation implies that the PHI is stable under bounded perturbation of weights, as well as rough isometries. In this talk I will discuss the proof of the stability of the elliptic Harnack inequality.

This is joint work with Mathav Murugan (UBC).