

Meeting on Computational and Analytic Problems in Spectral Theory

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Abstract of Talk

PATH-LAPLACIAN OPERATORS ON DISCRETE GRAPHS

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Path-Laplacian operators on discrete graphs are generalisations of discrete Laplacians where not only the neighbouring vertices are taken into account but also vertices with a larger distance. In this talk properties of these operators and certain combinations of them are presented. Moreover, a corresponding diffusion equation is discussed and when normal or anomalous diffusion occurs.