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Turbulence under Fractal Fourier Decimation¹ LUCA BIFERALE,

University of Rome "Tor Vergata", ALESSANDRA LANOTTE, Cnr-Isac, SHIVA MALAPAKA, University of Rome "Tor Vergata", FEDERICO TOSCHI, Technical University of Eindhoven — We present a systematic investigation of 3D turbulent flows evolved on a highly decimated set of Fourier modes. In particular, we investigate the change in small-scales intermittency when the flow is constrained to excite only a fractal set of modes but keeping the symmetries of the original 3D Navier-Stokes equations.

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