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Critical phenomena Aspects of Fully Developed Turbulence in Fluids and Plasmas BHIMSEN SHIVAMOGGI, University of Central Florida — A new perspective on the critical phenomena aspects of fully-developed turbulence (FDT) is considered [1]. The "energy" dissipation rate is identified as the suitable order parameter for the FDT problem. Multi-fractal model has been used to provide a detailed structure for the critical exponent associated with this order parameter. This exhibits an interesting universality covering radically different FDT systems in fluids and plasmas.

References:

[1] B.K.Shivamoggi : Chaos, Solitons and Fractals, In press (2006)

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