

# Renormalization, rigidity and universality

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## **Abstract**

70 years ago, Kolmogorov's address at the ICM marked the beginning of KAM theory and rigidity theory of dynamical systems. Approximately at the same time, renormalization ideas originated in quantum field theory. They were introduced in dynamical systems about 45 years ago, following the surprising discovery of metric universality. By now, renormalization has become one of the most powerful tools in the asymptotic analysis of dynamical systems. We will discuss the basic conceptual features of the renormalization approach to rigidity and universality problems, and some recent results.