CRC 1624 HIGHER STRUCTURES, MODULI SPACES AND INTEGRABILITY

Talk April 2, 15:30 – 16:20

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## **Renormalons for the people**

Renormalons are the smoking guns in perturbation theory for a wide class of nonperturbative effects. They have been mostly studied in QCD phenomenology, but as I will try to argue in this talk, renormalons and their associated non-perturbative corrections are fundamental aspects of quantum field theories. I will first illustrate the existence of renormalons in simple models, review their properties, and describe some recent progress in the topic, as well as open problems.