

C5 AdS/CFT Correspondence: Integrable Structures and New Observables

This project proposes a program of research at the interface of ten-dimensional superstring theory, four-dimensional quantum gauge field theory, and the theory of two-dimensional integrable models. The goal is to analyze the appearing integrable structures, to apply them to the exact computation of the observables of string and gauge theory, and to ultimately prove the connecting conjectured string-gauge dualities.