New Frontiers in Theoretical Physics - XXXV Convegno Nazionale di Fisica Teorica and GGI 10th anniversary



Contribution ID: 31

Type: not specified

Hagedorn spectrum and thermodynamics of SU(2) and SU(3) Yang-Mills theories

Thursday, 19 May 2016 16:00 (20 minutes)

We discuss the equation of state in the confining regime of SU(N) Yang-Mills theories in (2+1) and (3+1) dimensions. We show that the results are described very well by a gas of massive, non-interacting glueballs, provided one assumes that, in addition to the known particles lighter than the two-particle threshold, the theory features a physical spectrum described by an exponentially growing Hagedorn density, which can be modeled by a bosonic closed-string model.

Primary author: CASELLE, Michele (TO)
Co-authors: NADA, Alessandro (TO); PANERO, Marco (University of Helsinki)
Presenter: CASELLE, Michele (TO)
Session Classification: Parallel Session 19 pm1