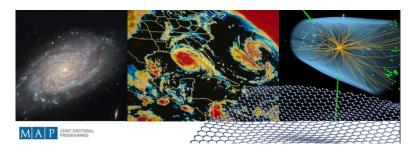
## **MAP-Fis Research Conference**



Contribution ID: 116

Type: Contributed Talk (20 minutes)

## Numerical tests of the large charge expansion

Friday 11 October 2024 14:50 (20 minutes)

We perform Monte-Carlo measurements of two and three-point functions of charged operators in the critical O(2) model in 3 dimensions. Our results are compatible with the predictions of the large charge superfluid effective field theory. We improved the Worm algorithm to obtain reliable

measurements for large charge values. We devised a measurement scheme that mitigates the uncertainties due to lattice and finite-size effects.

## Which topic best fits your talk?

High Energy Physics and Cosmology

Author: GUILHERME BOURA DE MATOS, José (FCUP)

Presenter: GUILHERME BOURA DE MATOS, José (FCUP)

Session Classification: High Energy Physics & Cosmology II (Chair: Carlos Herdeiro, Universidade

de Aveiro) - Sala Sousa Pinto, DM (11.2.6)