

GAST

(Gauge and String Theories)

Sezione di Pisa

01 Luglio 2022

Coordinatore nazionale: Domenico Seminara (Firenze)

Coordinatore locale: Stefano Bolognesi

Nodi: Bologna, Firenze, Parma, Perugia, Pisa, Trieste

PERSONALE

Stefano Bolognesi (UniPi Professore Associato, Incarico di ricerca INFN)

Kenichi Konishi (UniPi, Associato Eminente INFN)

Marco Barsanti (dottorando Unipi terzo anno, tesi sara' discussa Agosto 2022)

(Andrea Luzio, perfezionando SNS)

Attività di Ricerca 2021-2022

Non-perturbative aspects of gauge theories;
Symmetries and generalized symmetries;
Anomalies, strong anomalies, chiral anomalies and generalized anomalies;
Chiral gauge theories at strong coupling;
Topological solitons, Skyrmions, electroweak Skyrmions;
Charged hairy black holes in AdS and complexity;
Quantum measurement problem.

Preprints e Pubblicazioni 2021-2022

[arXiv:2206.09559](#) Near-BPS Skyrmions

Authors: [Sven Bjarke Gudnason](#), [Marco Barsanti](#), [Stefano Bolognesi](#)

[arXiv:2206.00538](#) Dynamical Abelianization and anomalies in chiral gauge theories

Authors: [Stefano Bolognesi](#), [Kenichi Konishi](#), [Andrea Luzio](#)

[arXiv:2205.03365](#) On the time dependence of holographic complexity for charged AdS black holes with scalar hair

Authors: [Roberto Auzzi](#), [Stefano Bolognesi](#), [Eliezer Rabinovici](#), [Fidel I. Schaposnik Massolo](#), [Gianni Tallarita](#)

[arXiv:2111.14723](#) Quantum fluctuations, particles and entanglement: a discussion towards the solution of the quantum measurement problems

Authors: [Kenichi Konishi](#)

[arXiv:2105.03921](#) JHEP08(2021)028 Strong anomaly and phases of chiral gauge theories

Authors: [Stefano Bolognesi](#), [Kenichi Konishi](#), [Andrea Luzio](#)

[arXiv:2102.12134](#) JHEP05(2021)134 Near-BPS baby Skyrmions with Gaussian tails

Authors: [Sven Bjarke Gudnason](#), [Marco Barsanti](#), [Stefano Bolognesi](#)

Seminari

Bolognesi, CAQCD 22 Minneapolis, ``Strong and Chiral theories'' Maggio 2022

Luzio, TFI Venezia, ``Chiral theories dynamics from symmeries and anomalies'' Giugno 22

Konishi, Harvard, ``Anomalies, dynamics and phases in strongly-coupled chiral gauge theories: recent developments'',
``Quantum fluctuations, particles and entanglements: Towards the solution of the quantum measurement problems'',
Luglio 22

Barsanti, GMM Kent, ``Near BPS Skymions'', Luglio 22

Tesi

Magistrale: Bruno Bucciotti, ``Black Hole Information Paradox and Asymptotic Symmetries'', Ottobre 21

Magistrale: Giacomo Santoni, ``The Electroweak Skymion'', Ottobre 21

Dottorato: Marco Barsanti, ``A near-BPS analysis for the Skyrme model'', Agosto 22