

GAST

(Gauge and String Theories)

Sezione di Pisa

29 Giugno 2021

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)

laureandi magistrali: Bruno Bucciotti, Giacomo Santoni

Attività di Ricerca

Argomenti di ricerca

- (Chiral) Gauge theories (non-perturbative aspects), (Generalized) Symmetries and Anomalies, Strong anomaly and large N effective action.
- Gauge-Gravity duality and applications, holographic QCD and baryons, finite density QCD.
- Topological solitons near the BPS limit, baby-Skyrmions.

Preprints e pubblicazioni

- [arXiv:2106.02410](#) Baby-Skyrmions dressed by fermions, an analytic sector [Marco Barsanti](#), [Gianni Tallarita](#)
- [arXiv:2105.03921](#) Strong anomaly and phases of chiral gauge theories [Stefano Bolognesi](#), [Kenichi Konishi](#), [Andrea Luzio](#)
- [arXiv:2102.12134](#) Near-BPS baby Skyrmions with Gaussian tails [Sven Bjarke Gudnason](#), [Marco Barsanti](#), [Stefano Bolognesi](#) JHEP 2105:134, 2021
- [arXiv:2102.00680](#) Holographic Nuclear Physics with Massive Quarks [Salvatore Baldino](#), [Lorenzo Bartolini](#), [Stefano Bolognesi](#), [Sven Bjarke Gudnason](#) Phys. Rev. D 103, 126015 (2021)
- [arXiv:2101.02601](#) Probing the dynamics of chiral SU(N) gauge theories via generalized anomalies [Stefano Bolognesi](#), [Kenichi Konishi](#), [Andrea Luzio](#) Phys. Rev. D 103, 094016 (2021)
- [arXiv:2006.02394](#) Analytic Baby Skyrmions at Finite Density [Marco Barsanti](#), [Stefano Bolognesi](#), [Fabrizio Canfora](#), [Gianni Tallarita](#) European Physical Journal C
- [arXiv:2006.01726](#) Near-BPS baby Skyrmions [Sven Bjarke Gudnason](#), [Marco Barsanti](#), [Stefano Bolognesi](#) JHEP 2011:062, 2020