Curriculum Vitae

June 20, 2023

Dr. Hua-Sheng Shao

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Family Name: SHAO First Name: Hua-Sheng Civil Status: Married, two children Date of birth: 8 November 1986 Place of birth: Zhejiang, China Nationality: Chinese

Degrees

- 2014 Jun, Ph.D. in Theoretical Physics, Peking University.
 - **Title:** *Heavy Quarkonium Production Phenomenology and Automation of One-Loop Scattering Amplitudes Computations*
 - Thesis director: Prof. Kuang-Ta Chao
- 2009 Jul, B.Sc. in Physics, Peking University.
- 2009 Jul, B.Sc. in Mathematics and Applied Mathematics (2nd major), Peking University.

Professional Experience

- 2017-now, CNRS Permanent Researcher at Laboratoire de Physique Théorique et Hautes Énergies (LPTHE), Paris, France.
- 2017-2017, Lagrange postdoctoral fellow at Lagrange Institute and LPTHE, Paris, France.
- 2014-2017, Postdoctoral fellow at CERN, Geneva, Switzerland.
- 2013-2014, Ph.D assistant at Peking University, Beijing, China.
- 2012-2013, Associate personnel (Ph.D) at CERN, Geneva, Switzerland.
- 2009-2012, Ph.D assistant at Peking University, Beijing, China.

Honors and Awards

- 2016, Springer Theses award. [nominated thesis published in Springer Theses Series; see introduction]
- 2014, Excellent graduates in Beijing.
- 2014, Award on doctoral dissertation, Peking University.
- 2012 and 2013, National Scholarship, China.
- 2009-2014, President Scholarship of Peking University.

Grants

- 2022-2027, an ERC starting grant **BOSON** funded by European Research Council entitled "BOosting the knowledge of the Strong interaction from quarkONium : an advanced simulation framework and beyond", obtained 1.5M Euro, [Hua-Sheng Shao (PI)].
- 2021-2022, an IEA project **GlueGraph** funded by CNRS, obtained 5K Euro per year for the travels and accomodations between France and Poland, [**Hua-Sheng Shao** (PI)].
- 2021-2025, an ANR PRC project **PrecisOnium** funded by the French National Research Agency entitled "PRECISONIUM: Advancing the Precision of Quarkonium-Production Studies", *I shared 190K Euro out of 540K Euro funded*, [Jean-Philippe Lansberg (PI) and **Hua-Sheng Shao**].

Citations Summary

- **Publications summary**: 93 in total, 65 published journals, 2 preprints, 7 reports, 21 proceedings. These include 18 letters. Seven of them have been published in Physical Review Letters, and eleven of them have been published in Physics Letters B. Two reviews have been published in (peer-reviewed journals) Physics Reports and Progress in Particle and Nuclear Physics.
- **Total number of citations**: 14287 in total, 11292 corresponding to published journals. It includes one published paper with **7600**+ citations, one paper with **1900**+ citations, one paper with **600**+ citations, three papers with **250**+ citations, nine papers with **100**+ citations and 13 papers with **50**+ citations. [*INSPIRE data at June 20, 2023*]
- Average number of citations: 153.6 in total, 173.7 corresponding to published journals. [*INSPIRE data at June 20, 2023*]
- **h**_{HEP} **index**: **h**_{HEP} = 36 in total, **h**_{HEP} = 32 corresponding to published journals. [*INSPIRE data at June 20, 2023*]

Activities in Teaching

- Oct 05-18 2022, discussion leader at the fifth Asia-Europe-Pacific School of High-Energy Physics (Alpensia Resort, Pyeong Chang, South Korea), 13.5 hours.
- June 28-July 02 2021, two lectures at "The MCnet Beijing School on Monte Carlo Event Generators" (MCnet School 2021 Beijing) (University of Chinese Academy of Sciences, Beijing+online, China), 2 hours.
- Nov 18-22 2019, three lectures (videos of NLO I,II,III) at MadGraph School 2019 (The Institute of Mathematical Sciences, Chennai, India), 3 hours.
- Nov 19-23 2018, a lecture and 3 tutorials at "FeynRules/MadGraph School on Collider Phenomenology" (MadGraph School 2018) (University of Science and Technology of China, Hefei, China), 1 hour+4.5 hours.
- Oct 12-25 2016, discussion leader at the third Asia-Europe-Pacific School of High-Energy Physics (IHEP and UCAS, Beijing, China), 13.5 hours.
- July 26-28 2016, 3 lectures at CERN summer school (CERN, Geneva, Switzerland), 9 hours.
- July 26-28 2016, MADGRAPH5_AMC@NLO tutorial for ATLAS and CMS experimentalists (CERN, Geneva, Switzerland), 6 hours.
- Nov 23-27 2015, a lecture at Madgraph school (Shanghai Jiao Tong University, Shanghai, China), 1 hour.
- Semester 2010 Sep-2011 Jan, assistant teaching in Quantum Mechanics for undergraduate students (Peking University, Beijing, China), 54 hours.

Other Scientific Activities

- Referee for Physical Review Letters, Physics Letters B, Journal of High-Energy Physics, Physical Review D, European Physical Journal A, European Physical Journal C, International Journal of Modern Physics A, Frontiers in Physics, Advances in High Energy Physics, Few-Body Systems.
- Referee for the grant proposals of ANR (French National Research Agency) and SNSF (Swiss National Science Foundation).
- Topical convener of the quarkonium working group (QWG) for the topic group "Automated calculations and interface to Monte Carlo" since October 2021.
- Co-organiser (co-chair) of the workshop "QCD@LHC 2022", IJCLab Orsay, 28 November 02 December 2022.
- Topic convener of the workshop "virtual Quarkonia As Tools 2021", online, 22-26 March 2021.
- The convener of the QCD parallel session of the "2020 International Workshop on the High Energy Circular Electron Positron Collider", Shanghai Jiao Tong University and Tsung-Dao Lee Institute, Shanghai, China, 26-28 October 2020.

- Particle physics and cosmology seminar organizer in Laboratoire de Physique Théorique et Hautes Énergies, Paris, France, 2018 2022.
- Topic convener of the workshop "Quarkonia As Tools", Centre Paul Langevin, Aussois, Vanoise Massif, France, 12-18 January 2020.
- Topic convener of the workshop "Quarkonia As Tools", Centre Paul Langevin, Aussois, Vanoise Massif, France, 13-19 January 2019.
- A member of the organising committee of the Institut Pascal workshop "Ultimate precision at hadron colliders", LAL, Orsay, France, 25 November-06 December 2019.
- Volunteer for 20th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2012), Peking University, Beijing, China, 13-18 August 2012.

Languages

- Native in Chinese.
- Fluent in English.
- Basics in French.