



## *Dr. Debadeepti Mishra*

**Designation :** Assistant Professor (Guest Faculty)

**Qualification :** M.Sc Physics(Gold Medalist)

**Date of Birth :** 05/07/1991

**Date of Joining :** 06/07/2024

**Tel :** 8249515006

**Email :** [dibyadeepti@gmail.com](mailto:dibyadeepti@gmail.com)

**ORCID :** <https://orcid.org/0000-0003-3910-6796>

**VIDWAN :** <https://vidwan.inflibnet.ac.in/profile/553590>

**WOS :** <https://www.webofscience.com/wos/author/record/KYP-1771-2024>

- **Area of Research :** Experimental Heavy-ion Collisions in High Energy Physics
- **Courses Taught :** Mathematical Physics, Quantum Mechanics, Classical Mechanics, Electronics, Nuclear and Particle Physics
- **Educational Qualification :**

Degree	University/Board	Year of Passing	Percentage of marks	Remarks
Ph.D	National Institute of Science Education and Research, Jatni, Odisha	2019	Awarded	
M.Sc. (Physics)	Department of Physics, Utkal University, Vanivihar, Bhubaneswar, Odisha	2013	90.7%	Gold Medalist
B.Sc.	Swami Vivekananda Memorial Auto. College, Jagatsinghpur, Odisha	2011	89.625% (Hons)	Best Graduate
Higher Secondary	Council of Higher Secondary Education, Odisha	2008	68.17%	
Secondary	Board of Secondary Education, Odisha	2006	85.33%	

➤ **Ph.D (Physics) 2013 -2019)**

**Thesis Title** : “Particle Production Studies in Au+Au and U+U Collisions Using the STAR detector at RHIC and Understanding the Freeze-out Dynamics”

**Institute** : National Institute of Science Education and Research, Jatni, Bhubaneswar, Odisha - 752050

**Supervisor** : Prof. Bedangadas Mohanty, National Institute of Science Education and Research, Bhubaneswar, Odisha

**Co-Supervisor** : Dr. Lokesh Kumar, Panjab University, Chandigarh, Punjab

**Date of Defense** : 22<sup>nd</sup> November, 2019

**Area of Research** : Experimental Heavy-ion Collisions in High Energy Physics

➤ **Academic Awards:**

- **Best Poster presentation** in the 61<sup>st</sup> DAE – BRNS Symposium on Nuclear Physics, December, 2016
- **University Gold Medal** for First position in P.G Examination of Physics 2013, Utkal University
- **Lalit Kumar Panda Memorial Gold Medal** for Highest Percentage of Marks on P.G Examination of Physics 2013, Utkal University
- **Dr. Indumati Sheshadri Memorial Gold Medal** Highest Percentage of Marks in P.G Examination of Physics 201, Utkal University
- **Ashok Kumar Mishra Memorial Gold Medal** for First Position in P.G Examination of Physics 2013, Utkal University
- **Anand Govind Cash Prize** for Highest Mark in Physics in Degree Exam 2011, S.V.M. Autonomous College Jagatsinghpur
- **Sripati Nanda Memorial Prize** for Highest Mark in Degree Exam 2011, S.V.M. Autonomous College, Jagatsinghpur
- **Lokanath Sahoo Memorial Cash Prize** for Best Graduate in Degree Exam 2011, S.V.M. Autonomous College, Jagatsinghpur

➤ **Academic Achievements:**

- **NET (National Eligibility Test)** for Lectureship in India 2014
- **GATE (Graduate Aptitude Test in Engineering)** in 2013

➤ **Technical Skills:**

- **Programming Languages:** C, C++, Fortran, Visual Basic, ROOT, Scilab
- **Database Management:** Microsoft Access
- **Operating Systems:** Unix/Linux, Windows

➤ **National Conferences:**

- **Poster :** Freeze-out Parameters in Heavy-ion Collisions at AGS, SPS, RHIC and LHC Energies, **DAE Symposium on Nuclear Physics (2014)**, Varanasi, India.
- **Poster :** Identifies Particle Production in Au+Au Collisions at  $\sqrt{s_{NN}} = 14.5$  GeV in STAR (For the STAR Collaboration), **DAE Symposium on Nuclear Physics (2015)**, Andhra Pradesh, India.
- **Talk :** Identifies Particle Production in Au+Au Collisions at  $\sqrt{s_{NN}} = 14.5$  GeV in STAR (For the STAR Collaboration), **Asian Triangle Heavy Ion Conference (ATHIC) 2016**, New Delhi, India.
- **Poster :** Freeze-out Conditions in proton-proton Collisions from SPS to LHC Energies, **DAE Symposium on Nuclear Physics (2016)**, Kolkata, India.
- **Talk :** Identified Particle Production in U+U Collisions at  $\sqrt{s_{NN}} = 193$  GeV in STAR, **XXII DAE Symposium on High Energy Physics (2016)**, New Delhi, India.
- **Poster :** Freeze-out Systematics due to the Hadron Spectrum, **DAE Symposium on Nuclear Physics (2017)**, Punjab, India.

➤ **List of Conference Proceedings:**

- **Freeze-out Parameters in Heavy-ion Collisions at AGS, SPS, RHIC and LHC Energies**  
*Sandeep Chatterjee, Sabita Das, Lokesh Kumar, D. Mishra et al.*  
Proceeding of DAE Symp. on Nucl, Phys. **59** (2014) **714-715**
- **Identified Particle Production in Au+Au Collisions at  $\sqrt{s_{NN}} = 14.5$  GeV in STAR**  
*Debadeepti Mishra (For the STAR Collaboration)*

Proceedings of DAE Symp. on Nucl. Phys. **60** (2015) **764-765**

- **Identified Particle Production in Au+Au Collisions at  $\sqrt{s_{NN}} = 14.5$  GeV in STAR**

*Debadeepti Mishra (For the STAR Collaboration)*

Proceedings of Asian Triangle Heavy Ion Conference (ATHIC) **59** (2016)

- **Freeze-out Conditions in proton-proton Collisions from SPS to LHC Energies**

*Sabita Das, Debadeepti Mishra, Sandeep Chatterjee, and Bedangadas Mohanty*

Proceedings of DAE Symp. on Nucl. Phys. **61** (2016) **782-783**

- **Identified Particle Production in U+U Collisions at  $\sqrt{s_{NN}} = 193$  GeV in STAR**

*Debadeepti Mishra (For the STAR Collaboration)*

Proceedings of XXII DAE Symposium on High Energy Physics, Springer Proc. Phys. **203** (2018) **247-249**

- **Freeze-out Systematics due to the Hadron Spectrum**

*Sandeep Chatterjee, Debadeepti Mishra, Bedangadas Mohanty, Subhasis Samanta*

Proceedings of DAE Symp. on Nucl. Phys. **62** (2017) **920-921**

### ➤ **List of Publications:**

- **Freeze out Parameters in Heavy-ion Collisions at AGS, SPS, RHIC and LHC Energies**

*Sandeep Chatterjee, Sabita Das, Lokesh Kumar, D. Mishra, Bedangadas Mohanty, Raghunath Sahoo and Natasha Sharma*

Advances in High Energy Physics, **349013** (2015)

- **Freeze-out conditions in proton-proton Collisions at the Highest Energies Available at the BNL Relativistic Heavy Ion Collider and the CERN Large Hadron Collider**

*Sabita Das, Debadeepti Mishra, Sandeep Chatterjee, and Bedangadas Mohanty*

Phys Rev. C **95**, 014912, (2017)

- **Freezeout systematics due to the Hadron Spectrum**

*Sandeep Chatterjee, Debadeepti Mishra, Bedangadas Mohanty, Subhasis Samanta*

Phys Rev. C **96**, 054907, (2017)

- **Bulk Properties of the System Formed Au+Au collisions at  $\sqrt{s_{NN}} = 14.5$  GeV Using the STAR Detector at RHIC**  
*J. Adam et al. (STAR Collaboration)*  
*(Primary authors : Debadeepti Mishra, Vipul Bairathi, Subhash Sinha, Md. Nasim, Lokesh Kumar, Bedangadas Mohanty, Declan Keane)*  
 Phys, Rev, C **101**, 024905 (2020)
- **Pion, Kaon and (Anti-)Proton Production in U+U Collisions at  $\sqrt{s_{NN}} = 193$  GeV in STAR**  
*J. Adam et al. (STAR Collaboration)*  
*(Primary authors : Debadeepti Mishra, Lokesh Kumar and Bedangadas Mohanty)*  
 Phys. Rev. C **107**, 024901 (2023)

➤ **Personal Profile:**

Father's Name : Radha Raman Mishra  
 Mother's Name : Gourirani Mishra  
 Spouse Name : Nirakar Sahoo  
 Date of Birth : 5<sup>th</sup> July 1991  
 Gender : Female  
 Marital Status : Married  
 Contact address : Flat No. AG-04, Gouri Shankar Residency, Lane -1 ,  
 Laxmi Vihar, Po :- Sainik School, Bhubaneswar – 751005,  
 Odisha  
 Language Known : Odia, Hindi, English

➤ **Professional Referees:**

- **Dr. Bedangadas Mohanty**  
 Position: Professor, Chairperson, School of Physical Sciences, NISER, Jatani  
 Email: [bedanga@niser.ac.in](mailto:bedanga@niser.ac.in), [bedanga@gmail.com](mailto:bedanga@gmail.com)

• **Dr. Lokesh Kumar**

Position: Assistant Professor, Panjab University, Chandigarh

Email: [lokesh.pu@gmail.com](mailto:lokesh.pu@gmail.com)

Date: 30-07-2024

Place: Bhubaneswar

**(Debadeepti Mishra)**