Dr. Hussam Al Omari
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Ph.D., 2014, Nuclear and Accelerator
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Education

BSc Physics, Yarmouk University, Jordan, 2005.
MSc Radiation Physics, Yarmouk University, Jordan, 2009.
PhDNuclear & Accelerator Physics, Frankfurt University, Germany, 2014.

Short Bio

Dr. Husam Al-Omari earned his Bachelor in Physics (2005) and Master in Radiation Physics (2009) at Yarmouk University, Jordan. His PhD in Nuclear & Accelerator Physics from the Frankfurt University, Germany in 2014. In his thesis work he studied the laser proton beam transport through the solenoid magnetic lens and investigated suggested corrections that optimize the proton beam as a later beam source.

After completing his PhD, Al-Omari accepted as a Scientist at GSI (Centre for Heavy Ion Research GmbH). This is to work in the Compact Low Energy Beam Transport (LEBT) project for developing a high performance accelerator with superior beam current to be utilized by scientists for FAIR project (Facility for Antiproton and Ion Research). His job was focusing on the beam transport from the uranium ion source up to the Radiofrequency Quadrupole (RFQ) entrance through the straight line quadrupoles and solenoids. In addition to use an aperture as a filtering tool for the uranium +3 ions in the way of the beam.

Dr. Husam Al-Omari is an Assistant Professor in Advanced Energy Engineering Technology- Abu Dhabi Polytechnic (ADPoly), Abu Dhabi, UAE since 2015. In parallel to his career in education, Dr. Al- Omari has a versatile field of research interest's including Neutron and Proton Therapy, Beam Optimization of Laser Accelerated Protons, and Accelerator Physics. Dr. Al-Omari has 7 published refereed articles in scholarly international journals and proceedings of international conferences. Dr. Al- Omari has a collaboration with the Nuclear Engineering and Medical Diagnostic Imaging departments in University of Sharjah. He is a member of a Neutron Capture Therapy (NCT) Project at University of Sharjah. His job is focusing on the simulation part using FLUKA & GEANT4 Monte Carlo Transport Codes, effectively participate in the experimental tests and dose measurements. Meanwhile of his collaboration in NCT Project, Dr. Al-Omari is currently continuing his work on proton beam optimization and proton therapy using Monte Carlo Transport Codes. Dr. Al-Omari has a full membership in European Physical Society (EPS).