MU_FSCI_PHYS_DATA_Mohamed.Ash

PERSONAL DATA

- **Gender:** Male
- **Date of birth**: July 10 th, 1982.
- **Place of birth**: Meet Om saleeh- Berket El Sabee- Menoufia, Egypt
- **Marital status**: Married
- **Complete mailing address.** Physics Department - Faculty of Science - Menoufiya University - Shebin El-Kom 32511 – Egypt
- **Nationality**: Egyptian.

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MU_FSCI_PHYS_LINK_Mohamed.Ash

EDUCATION

MENOUFIYA UNIVERSITY,
FACULTY OF SCIENCE

- 1999-2003 **B**.SC. IN PHYSICS

  Graduated in 2003 with graduation grade Very Good

  Graduation project in DYELASER with Excellent grade

- 2004-2005 **PRE COURSES FOR M. SC** in physics Dept. with.

- 2005-2009 **M. SC IN NUCLEAR PHYSICS (Master Degree in NUCLEAR PHYSICS).**

ACADEMIC ACTIVITY

Years of service		**Name and place of employer/ organization.**	**Title of position**	**Type of work**
From	To			
29/1/2004	6/4/2009	Physics Dept. - Faculty of Science- Menoufia University- Egypt	Demonstrator of Phys.	Member of research and teach stuff in Physics Dept.
6/4/2009	Up to now	Physics Dept. - Faculty of Science- Menoufia University- Egypt	Assistant lecture of physics	Member of research and teach stuff in Physics Dept.

PROFESSIONAL TRAINING

- September-2006 EFFECTIVE TEACHING PROGRAM Faculty and Leadership Development Project (FLDP)
- Mars-2007 OCCUPATION ETHICS AND LITERATURE PROGRAM (FLDP)
- Mars-2007 EFFECTIVE COMMUNICATION SKILLS PROGRAM (FLDP)
- May-2007 METHODS OF SCIENTIFIC RESEARCH PROGRAM (FLDP)
- February-2008 QUALITY STANDARDS IN THE LEARNING PROCESS PROGRAM (FLDP)
- June-2008 ORGANIZATION OF SCIENTIFIC CONFERENCES PROGRAM (FLDP)
- Nov,17-22, 2008 **SESAME-JSPS School and SESAME 7th Users Meeting** Cairo University Cairo Egypt
- 29th May to 4th June 2009 Egyptian School on High Energy Physics Center of Theoretical Physics British University of Egypt (CTP- BUE)
- **18/10/2009 to 7/11/2009 Joint institute for nuclear research in Dubna -Russia for Advanced summer school in their Labs**

SKILLS

LANGUAGE SKILLS

- Fluent in Arabic (mother tongue)
- Good command of English

COMPUTER SKILLS

- **ICDL.**
- Good in Microsoft Office Programs

TECHNICAL SKILLS

- Good User of MATHEMATICA Program
- Good User of MAPLE Program
- Good User of MATLAB Program

PERSONAL HILIGHTS

- Able to work under pressure and to adapt my self with any conditions
- Able to work well with all levels of people
- Able to learn new tasks quickly
- Active, highly motivated and a team player
- Skilled at leading and managing groups
- My communication skills with peoples not bad
- Interested in scientific reading and Internet navigation

7- About my Master	
Title	Heavy ion collision at high energy
Abstract	The pre equilibrium model (thermodynamic model) is used to study the P^{1}+P^{1}, S^{32}+O^{16}, Au^{197}+Au^{197} and Ne^{20}+U^{238} collisions at 20 and 130 AGeV. A frame of reference is assumed to coincide with the center of the target, and the projectile is located at a position r, with the impact parameter. The relative projectile density, η b) is then calculated. The function η (r, b) shows peaks at different values of radial distance(r) and for different collisions. The parameter η is then used to evaluating the temperature and its gradient inside the nuclear matter. The proton density function in its equilibrium form is calculated over the effective range of the thermodynamic system. The energy spectra of proton, kion and pion produced by Au+Au collision at 20&130 GeV are studied along with the spatial variation of the function $f_o(r, p)$. Complete stopping of Au projectiles with Au target is predicted. The present application of thermodynamic model predicts the same temperature fo all emitted particles, but is not able to reproduce the experimental observation of th apparent temperatures of emitted pions, kaons and protons. It is found that particle emitted in the forward direction are produced in the early stage of the reaction, far from the equilibrium. Basic Glauber theory using Monte Carlo Simulation for Heavy Ion Collision was applied. The number of participating nucleons and the number of binary collisions at different Impact parameter using Square and Woods-Saxon Shapes for the densities are studied. The study of density of charged nucleons in Au^{197} nucleus using Woods-Saxon density approximation showed that, the profile the density is Gaussian. Results from the Optical Glauber Model were compared with those from Monte Carlo calculation and with the data taken from RHICs for Au^{197}+ Au^{197a} and D^{2}+ Au^{197} collisions at energies 200 and 130 GeV. In Glauber Monte Carlo model we use two profiles of density, the Square Shape and the Woods-Saxon one. From fitting with data the Wooden-Saxon is more realistic than Square Shape.
Supervisors	1- Prof. Dr Mohammed Tarek Hussein Prof. of Theoretical physics, faculty of Scienc Cairo University President of ASRT Egypt 2- Prof. Dr Hussein M. El- Samman Prof. of Nuclear physics, faculty of Science, Menoufia University 3 - Prof. Dr Sanna M. A. Maize Prof. of Theoretical physics, faculty of Science, Menoufia University