XXXIV

Frank Wolfs (Chair RSPS)
Department of Physics and Astronomy
University of Rocheste

LIST OF SPEAKERS

NAME	LOCATION	TIME

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9:15 AM, On the Relativistic Projectile Motion: Angle of Projection when Range and Vertical Height are Equal

9:30 AM, Investigating the Spectral Composition of String Instruments

9:00 AM – 10:00 AM: SESSION IC. QUANTUM OPTICS (ROOM 175)

SESSION CHAIR: PROF. MICHAEL VINEYARD, UNION COLLEGE

9:00 AM, Fourier transform and Uncertainty Principle for a particle in an infinite square well

9:15 AM, Discriminatory Polarization Forces on Chiral Molecules

9:30 AM, Analog Electronic Laser Stabilization to an Atomic Reference

9:45 AM, Light Pulse Control of Quantum Information in Bose-Einstein Condensates

10:00 AM – 10:45 AM: SESSION II. POSTER SESSION (NUCLEUS)

Investigations of New Laboratory Measurements of Oxygen Desorption in Astrochemical Models

Physics in video games: Using numerical methods to simulate Newtonian physics

Quantifying Forces on Strongly Absorbing Materials Rotating in Optical Traps

Modes and Q Factors of the Top Plate of Guitars

Dust Mineralogy Survey for T-

11:00 AM, Establishing a Laser Induced Breakdown Spectroscopy System for Post-Detonation Nuclear Forensics Applications

11:15 AM, Noise Analysis in Terahertz Spectroscopy

11:30 AM, High-Throughput Electric Field Induced Second Harmonic Generation in Highly-Monodisperse Microdroplets

11:45 AM, Portable, Directional Neutron Detector

10:45 AM – 11:45 AM: SESSION IIIC. NUCLEAR AND PARTICLE PHYSICS (ROOM 175)

SESSION CHAIR: PROF. MARK JULY, HOUGHTON COLLEGE

10:45 AM, Measuring Parity Violation in Cobalt-60 Decay

11:00 AM, A table top demonstration of general relativity using the Mössbauer effect

11:15 AM, Materials Testing Using Non-Radiating Techniques

11:30 AM, Recovering from Saturation

12:00 PM – 1:00 PM: SESSION IV. LUNCH (MARANO CAMPUS CENTER)

1:00 PM – 2:00 PM: SESSION V. “ , PROF. SHASHI KANBUR, SUNY OSWEGO (ROOM 175)

3:00 PM, Measurement of the Primary D-T and D-D Ion Temperature Using Neutron Time of Flight Spectra in Inertial Confinement Fusion Experiments

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SESSION IA. ASTRONOMY I

Morphology of the Large Magellanic Cloud Using Classical Cepheids

Advisor:

Conditional Entropy Methods for Period Detection in Variable Stars

Advisor:

SESSION IB. EDUCATIONAL PHYSICS

Studying Collisions Using Tracker

Advisor:

Investigating the Spectral Composition of String Instruments

Discriminatory Polarization Forces on Chiral Molecules

Advisor:

Temperature Dependence of the Saturation Magnetization in Ferromagnetic Metallic Glasses

Advisor:

Physics in video games: Using numerical methods to simulate Newtonan physics

Advisor:

Design and Construction of a Cost-

SESSION IIIA. ASTRONOMY II

Quasar Emission Line Variability From Hubble Space Telescope Archive Data

Advisor:

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C IV Absorbers in the Sloan Digital Sky Survey

Advisor:

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Characterizing the Outflow Energetics of the 'Cloverleaf' Quasar Using Broad Absorption Lines

Advisor:

SESSION IIIB. INSTRUMENTATION/EXPERIMENTAL TECHNIQUES I

Neutron Transport Analysis of Small Module Reactors to Support U.S. Army Energy Requirements at Forward Deployed Locations

Portable, Directional Neutron Detector

Advisor:

Recovering from Saturation

Advisor:

SESSION VIA. CONDENSED MATTER AND BIOLOGICAL PHYSICS

3D Printed Prosthetics

Advisor:

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Design and Construction of a Laser Interferometer to Study Thin Metal Films

Advisor:

The Construction of a Deposition Chamber for the in-situ Study of Thin Metal Films

Advisor:

LIST OF PARTICIPANTS

Name	Affiliation

Name

Name	Affiliation