

Nuclear Physics, the Core of Matter, the Fuel of Stars

A symposium surveying the future of nuclear physics and celebrating 50 years of John Schiffer's research at Argonne

September 20-22, 2006

September 20, 2006 - Wednesday

19:30-21:00 **Reception at the Argonne Guest House**
Bus service from the Hotel at 19:15 and 20:00
Return bus service from the Guest House to the Hotel at 20:30 and 21:00

September 21, 2006 – Thursday – Building 203 Auditorium

08:00-09:00 Registration & Coffee
Bus service from the Hotel at 8:00 and 8:30

Session 1: (Rolf Siemssen – Chair)

09:00-09:15 **Al Sattelberger, Don Geesaman:** Welcome & Introduction
09:15-09:50 **Ben Mottelson:** The basis for independent particle motion in atomic nuclei revisited
09:50-10:00 Discussion
10:00-10:30 **Coffee Break**

Session 2: (Rick Casten – Chair)

10:30-11:05 **Takaharu Otsuka:** Structure of exotic nuclei and the nuclear force
Discussion
11:05-11:15 Discussion
11:15-11:50 **Augusto Macchiavelli:** Transfer reactions and nuclear structure: The road ahead
Discussion
11:50-12:00 Discussion
12:00-12:35 **Franco Iachello:** Nuclei: A testing ground for fundamental tests in physics
Discussion
12:35-12:45 Discussion

Session 3: (Linwood Lee – Chair)

14:00-14:35 **Stuart Freedman:** “I am not very happy about this” and the search for exotica in science
Discussion
14:35-14:45 Discussion
14:45-15:20 **Oswaldo Civitarese:** A critical review and the future of double-beta decay theoretical studies
Discussion
15:30-16:00 **Coffee Break**

Session 4: (Jerry Draayer – Chair)

16:00-16:35 **Zheng-Tian Lu:** Helium: probing the exotic and searching for the strange
Discussion
16:35-16:45 Discussion
16:45-17:20 **Gordon Cates:** Nuclear matter and electromagnetic probes in the 21st century
Discussion
17:20-17:30 Discussion
18:30 **Banquet at the Argonne Guest House**

Bus service from the Hotel at 18:00
Bus from the conference site at 18:15

September 22, 2006 – Friday – Building 203 Auditorium

Session 5: (Peter Bond – Chair)

Bus service from the Hotel at 8:15
09:00-09:35 **William Zajc:** New dimensions in relativistic heavy-ion collisions
Discussion
09:35-09:45 Discussion
09:45-10:20 **Walter Henning:** The landscape of nuclei: How far, how soon?
Discussion
10:20-10:30 Discussion
10:30-11:00 **Coffee Break**

Session 6: (Sam Austin – Chair)

11:00-11:35 **Michael Turner:** Nuclear astrophysics: From the beginning of time until the end of the Universe
Discussion
11:35-11:45 Discussion
11:45-12:15 **John Schiffer:** Perspectives
12:30 Adjourn
Bus service to the Hotel if necessary