

Friday, July 28, 2017

8:45 am – 2:00 pm



**Science Center
114**

2017 SUMMER SCIENCE RESEARCH SYMPOSIUM

*Highlighting undergraduate
research in the sciences at UD*



Plenary speaker:

Dr. Anil Pradhan

Professor, The Ohio State University

Too much X-ray exposure and what to do about it

X-rays utilization is ubiquitous yet highly inefficient. Basic physics considerations readily reveal the problems in imaging, diagnostics and radiation therapy. X-ray devices generally produce broadband output over a wide range from low to high energies. The resulting spectrum interacts inefficiently with biological targets: low energy X-rays fail to penetrate to the targeted organ, and high energy X-ray pass through without effect. One part of the solution would be to replace broadband X-ray machines with narrow-band quasi-monochromatic or monochromatic X-ray sources. The other part is concurrent development of nanomaterials as contrast agents that would enhance X-ray absorption, if delivered preferentially to the targeted site. I will describe the physical properties of existing and new X-ray devices, coupled to energy-matching with nanovehicles for biomedical applications.

Bio: Dr. Pradhan is currently a Professor in the Department of Astronomy at The Ohio State University. He is also affiliated faculty in the Chemical Physics program and the Biophysics graduate program.

Symposium Program

8:45 am – 9:15 am

Breakfast Mixer

Free breakfast!!!

9:15 am – 10:15 am

Plenary Session

10:15 am – 10:30 am

Break

10:30 am – 12:30 pm

Student Oral Session

12:30 pm – 2:00 pm

Student Poster Session

**Free lunch – Dewey's
Pizza!!!**

Contact information:

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Physics Department

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Celebrate outstanding undergrad research at UD!

Many undergraduate students spend their summers performing research in laboratories under the direction of UD science faculty members. This symposium serves to highlight the quality and breadth of undergraduate science research at UD. Please join us for oral and poster presentations by UD student researchers.

