

# 2009 PHYSICS LEADERS' MEETING AGENDA

## As of October 6, 2009

### Thursday, October 8

#### Faurot Field

8:00 p.m.

Football: Missouri versus Nebraska

### Friday, October 9

#### SESSION I: Room 236

8:00 a.m.

Coffee and Snacks

8:30 a.m. – 10:15 a.m.

State of the Physics Department

- Faculty and Research—Peter Pfeifer
- Graduate Program—Carsten Ullrich
- Undergraduate Program—Dorina Kosztin

10:15 a.m. – 10:30 a.m.

Break

10:30 a.m. – 11:40 a.m.

Faculty Presentations (15 minute talks + 5 min Q&A)

10:30 a.m. – 10:50 a.m.

Gavin King (new faculty): “A Precision Force Microscope for Biological Physics”

10:50 a.m. – 11:10 a.m.

Angela Speck: “The Astromineralogy of Stardust”

11:10 a.m. – 11:30 a.m.

Aigen Li: “Making Silicate Crystals in Space”

11:30 a.m. – 11:50 a.m.

Carlos Wexler: “Hydrogen Storage in Engineered Carbon Nanospaces”

#### SESSION II: Meeting Initially in the Library to Pick Up Lunch

Noon – 1:15 p.m.

Lunch and mentoring sessions with the students

***Leaders, faculty, and students will pick up lunch in the library and then go to a mentoring session as follows:***

- Industry—Room 216
- Academia—Room 236
- Government Labs—Room 234

#### SESSION III: Room 236

1:30 p.m. – 3:30 p.m.

Student Presentations (10 minute talks + 5 min Q&A)

1:30 p.m. – 1:45 p.m.

Nicholas Criswell: “Surface Enhanced Raman Spectroscopy Study of C<sub>60</sub>”

1:45 p.m. – 2:00 p.m.

Stephen Messenger: “A Template-Independent Technique for Obtaining Photometric Redshift Estimates for Dusty, Star-Forming Galaxies”

2:00 p.m. – 2:15 p.m.

Corinne Fletcher: “Mythbusting Stardust Formation Scenarios: Crystalline Silicates and New Insights into Oxygen-Rich AGB Stars”

2:15 p.m. – 2:30 p.m.

Lorien Hayden: “Frustrated Classical Heisenberg Model in 2 Dimensions with Nearest-Neighbor Biquadratic Exchange: Exact Solution for the Ground-State Phase Diagram”

- 2:30 p.m. – 2:45 p.m. Michael Kraus: “Small-Angle X-Ray Scattering: Rebuilding a Three-Dimensional Structure with One-Dimensional Data”
- 2:45 p.m. – 3:00 p.m. Suklima Guha: “The Effect of Stellar Pulsation Cycles on Dust Formation: a Temporal Study of the Infrared Spectrum of Oxygen-rich Asymptotic Giant Branch (AGB) Star, T Cep.”
- 3:00 p.m. – 3:15 p.m. Jimmy Romanos: “Carbon Nanospaces for High-Capacity Hydrogen and Natural Gas Storage”
- 3:15 p.m. – 3:30 p.m. Mohammad Sherafati and Matt Mower: “Physics and Astronomy Graduate Student Association (PAGSA)”
- 3:30 p.m. – 3:45 p.m. Break

**SESSION IV: Room 236 (Closed Session for Physics Leaders)**

- 3:45 p.m. – 4:15 p.m. Determine Student Presentation Award Winners

**SESSION V: Room 236**

- 4:15 p.m. – 5:00 p.m. Tour of Labs (ALL-CRAFT/Pfeifer Lab)

**SESSION VI: Reynolds Alumni Center, Columns Ballroom D&E**

- 6:00 p.m. – 9:00 p.m. Reception and Dinner—Invitation attached, p. 3  
 Presentation of *2009 Physics Alumni Faculty Fellow Awards*  
 Award Recipients: Suchi Guha, Angela Speck

**Saturday, October 10**

**SESSION VII: Room 236**

- 8:00 a.m. – 8:15 a.m. Coffee and Snacks
- 8:15 a.m. – 9:15 a.m. Leaders and Faculty Discussion  
 Special Topic #1 (faculty): New initiatives (Meera, “A TIME for Freshman Physics in Missouri;” Hak, NSF-IGERT; Sashi, NSF-PIRE; Peter, Provost’s Strategic Initiatives; ...)  
 Special Topic #2 (Don Packwood, Jim Seeser): Attract/recruit outstanding undergrads through science fairs, full-ride scholarships, and premier undergraduate research program in Dept.
- 9:15 a.m. – 9:30 a.m. Break
- 9:30 a.m. – 10:45 a.m. Discussion with Dean Mike O’Brien, including faculty

**SESSION VIII: Room 236**

- 10:45 a.m. – 11:00 a.m. Break
- 11:00 a.m. – Noon Leaders and faculty discuss action items and letter to the Dean

**2010 Football Schedule**

September 4	Illinois (in St. Louis)
September 11	<b>McNeese State</b>
September 18	Open

September 25	<b>Miami, OH</b>
October 2	Open
October 9	<b>Colorado</b>
October 16	at Texas A&M
October 23	<b>Oklahoma (Homecoming)</b>
October 30	at Nebraska
November 6	at Texas Tech
November 13	<b>Kansas State</b>
November 20	at Iowa State
November 26/27	Kansas (in Kansas City)

*Dr. and Mrs. Peter Pfeifer cordially invite  
you and a guest to attend our annual  
Leader's dinner on  
Friday, October 9, 2009 at six in the  
evening until nine in the evening*

*The University Club at the  
Reynolds Alumni Center  
Columns Ballroom, D & E*

*Cash Bar*

*R.S.V.P to (573) 882-3335  
by September 30, 2009*

*Peter Pfeifer, Chair*