

Thursday, May 3, 2007

## Seminars

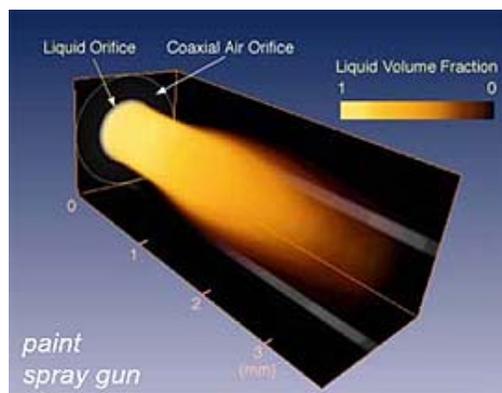
Argonne  
Leadership  
Computing Facility  
Seminar: **"Large Scale Parallel Molecular Dynamics Simulations of Materials"** by Alok Chatterjee, EPIR Technologies.  
10:30 a.m.,  
Building 221,  
Conference Room A216.

Materials Science  
Division  
Colloquium:  
**"Reinventing X-Ray Science: New X-Ray Sources, Optics and Detectors"** by Paul Fuoss (MSD).  
11 a.m., Building 212, Conference Room A157.

Advanced Photon  
Source Division  
Powder Diffraction  
Interest Group  
Monthly Meeting:  
**"Structures of Some Orthorhombic Carbonates Using HRXRD"** by Sytle Antao (APS).  
Noon, Building 431, Conference Room C010.

Physics Division  
Astrophysics  
Luncheon:  
**"Studies of Explosive Stellar Environments"**

## Science update



*Three-dimensional rendering of the air-assisted coaxial spray in the near-nozzle region of an industrial paint spray gun with an air pressure of 137kPa.*

## X-rays reveals secrets of high-speed sprays

High-speed air-assisted sprays have many industrial and consumer applications, such as surface finishing (paint and particle coating) and gas turbine combustion applications. However, until now a lack of visualization tools for multiphase flows has limited understanding of the fundamental physics that govern spray flow patterns and droplet deposition on the spray target.

Researchers using the X-ray Operations and Research 7-ID beamline at the Advanced Photon Source have now imaged the complex and transient multiphase spray flow just millimeters from a spray nozzle by using a fast X-ray phase-contrast imaging technique made possible by the intense APS X-ray beams. Their data revealed, for the first time, the drastic effect of the high-speed, atomizing air and near-nozzle liquid mass density distribution.

**Argonne, Met Lab workers may be eligible for compensation**

## Around the lab

### All invited to tonight's Cinco de Mayo social

Argonne's [Hispanic-Latino Club](#) will hold a Cinco de Mayo Social this evening. Doors open at 4:30 p.m.

The social will be held at the Exchange Club in Building 617. Cover charge is \$3. Horizontes Mexicanos, a children's dance company, will send six seniors from different Chicago high schools to perform folk Mexican dances from 5:30 - 6 p.m.

During the event, the club will sell raffle tickets for a Mary Kay Beauty Basket. Raffle tickets are \$1 each or six tickets for \$5.

### Tamale pickup today

Those who ordered tamales through the Hispanic-Latino Club fundraiser can pick them up today in the Lobby of Building 201 from 11:30 a.m. until 1 p.m. Drinks and baking goods will also be sold in the lobby during that time.

Tamales will not be sold at the Cinco-de-Mayo social event.

### Softball league to meet May 3

The Argonne Softball League will hold a meeting at noon in the Building 213 Cafeteria. Team captains should bring league fees of \$400 per team

### 617 Lower Level is open today

617 Lower Level will be open from 4:30 p.m. to 8 p.m., offering a comfortable setting for relaxation

**Using  
Gammasphere"**  
by Dariusz  
Seweryniak (PHY).  
Noon, Cafeteria,  
Dining Room A.

#### Friday, May 4

Physics  
Colloquium:  
**"Bringing  
Hearing to the  
Deaf Cochlear  
Implants: A  
Technical and  
Personal  
Account"** by Ian  
Shipsey, Purdue  
University. 11 a.m.,  
Building 203  
Auditorium.

Complete seminar  
listings can be  
found on [Inside  
Argonne](#).

Send seminar  
listings to  
[seminars@anl.gov](mailto:seminars@anl.gov).

Current and former workers at Argonne and the Metallurgical Laboratory are eligible to file claims for benefits under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA). Specified survivors may also be eligible for compensation.

The Paducah Energy Employees Compensation Resource Center is responsible for reaching potential claimants in Illinois to inform them of the potential benefits under the law. Representatives from the resource center will be at the Building 213 Cafeteria Tuesday, May 15, and Wednesday, May 16, to provide program information and answer questions. The representatives will also give two presentations each day, beginning at 11:15 a.m. and at noon in the cafeteria's Dining Room B. All employees are invited to attend.

EEOICPA, passed in 2000, provides compensation and medical benefits for employees who became ill as a result of working in the atomic weapons industry. EEOICPA is administered by the U.S. Department of Labor and contains two parts: Part B and Part E, each with distinct criteria for qualifications.

For more information, call 1-866-534-0599 (toll free), or see the [Department of Labor Web site](#).

#### **'Technical and personal' discussion of cochlear implants topic of colloquium**

Purdue University's Ian Shipsey will present "Cochlear Implants: a Technical and Personal Account" at a Physics Division Colloquium Friday, May 4, at 11 a.m. in the Building 203 Auditorium.

A particle physicist, Shipsey has been profoundly deaf since 1989. Recently he heard the voice of his 11-year-old daughter for the first time, and his wife's voice for the first time in 13 years thanks to a cochlear implant. In this talk, Shipsey will review the physiology of natural hearing from the perspective of a physicist, and describe the function of cochlear implants in the context of historical treatments, electrical engineering, psychophysics, clinical evaluation of efficacy and personal experience.

and conversation. The bar has domestic and imported beer, wine, mixed drinks and sodas for purchase. Hot snacks available for purchase include hot pretzel nuggets with cheese, chips with cheese or salsa and individual cheese pizzas.

## Working safely

### Lab hits 3 million hours without a lost workday injury

As of April 24, Argonne employees had worked 3.1 million hours without a lost workday injury. This represents about six months without an injury serious enough to require an employee to miss a day of work.

"Argonne's injury rate continues to decrease, thanks to the efforts of all employees who 'think safety' in everything they do," said Bob McCook. "We can all be proud of the record we've established, and the fact that Argonne employees are going home safe at night because we're watching out for each other."

## Safety topics

[Daily reports on significant safety occurrences in the DOE system.](#)

## Argonne in the news

Science Daily: Argonne researchers have successfully [laser-cooled and trapped atoms of radium](#) — the first time this rare element has been captured in a magneto-optical trap — with an assist from an unexpected source.

## Lunch menus

### Gift Shop

The Gift Shop located next to

### Building 213 Cafeteria

[The weekly menu](#) is online.

### Guest House Restaurant

Soup du jour - \$2.95

the cash registers offers clothing and other items with the Argonne logo, sundries and greeting cards for all occasions. The store is open from 7 a.m. to 2 p.m. Visa and MasterCard are accepted.

### Building 201 Coffee Shop

The Building 201 Coffee Shop hours:  
Monday through Friday 7 a.m. to 11 a.m. and 1 p.m. to 2:30 p.m.

### 401 Grill

The [401 Grill menu](#) is online.

Hours:  
Monday through Friday: Lunch 11 a.m. to 2 p.m., dinner 4:30 to 9 p.m.  
Saturday and Sunday: 11:30 a.m. to 7 p.m

**Breakfast Grill**  
Peanut butter and banana pancakes served with two bacon or sausage - \$3.75  
... add a 12 oz. Intelligentsia coffee and fresh melon - \$5.25

*The grill is open until 9 a.m. Breakfast items like sweet rolls, cereal, muffins, yogurt, coffee and juices are available until 10:30 a.m.*

**Soups ~ Stews ~ Chilis**  
Lentil (v) or white bean and bacon soup - small \$1.53, large \$2.09  
Texas chili - small \$1.78, large \$2.31

**Entrée Feature**  
Market bistro: pork ribs or oven-fried chicken served with home-made corn bread and one side dish - \$6.25

**Chef's Special**  
Pasta toss: penne pasta with chicken or Italian sausage with red and green peppers with creamy alfredo or marinara sauce, and garlic bread - \$6.07

**Luncheon Broiler**  
Grilled roast beef and Swiss cheese sandwich on sour dough - \$4.25  
... add French fries and coleslaw - \$5.75  
Grilled rainbow trout with vegetables - \$5.75

**Healthy Choice**  
Orange chicken served over Moroccan couscous (cal. 251 ~ fat 2gm (7.2%) ~ chol. 48mg) - \$4.75

**Budget Special**  
Calzone classico: sausage and pepperoni, or roasted vegetables. Includes a 16 oz. fountain soda - \$4.11

Sautéed catfish: potato - crusted catfish accented with chipotle cream sauce and grilled asparagus - \$8

Grilled brook trout salad: grilled brook trout on a tossed salad of spinach, pine nuts and red peppers, accented with a warm bacon dressing - \$8

Salmon salad: seared salmon over mixed greens with asparagus, tomatoes and cucumbers with a pomegranate vinaigrette - \$10

Fried chicken tenders tossed with barbecue sauce. Served with fries - \$6

Argonne dip: thinly sliced beef cooked in natural au jus, topped with melted provolone cheese. Served with fries - \$6.95

Smoked turkey reuben: grilled smoked turkey topped with sauerkraut, Swiss cheese and thousand island dressing. Served with fries - \$6

Cheeseburger: grilled beef patty topped with cheddar cheese, served with lettuce, tomatoes, pickle and fries - \$6

Soup & half sandwich: cup of warm soup with a half deli sandwich and Terra chips. Choice of turkey, ham or roast beef, with Swiss, cheddar or provolone cheese - \$6

Guest house wrapper : grilled breast of chicken tossed with bacon, lettuce and tomatoes, rolled in a flavored tortilla served with Terra chips - \$6

Caesar salad: Entrée \$5, with chicken \$6, with smoked salmon \$7

Luncheon hours are 11 a.m. to 1:30 p.m.

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Argonne Today is published daily by Communications & Public Affairs. The editor is [Dave Jacqué](#). Please do not reply to this e-mail. Send comments, suggestions and news to [info@anl.gov](mailto:info@anl.gov).