



# FIESTA 2017

## Fission Experiments and Theoretical Advances

Sep. 17 – 22, 2017  
Santa Fe, New Mexico, USA

<http://t2.lanl.gov/fiesta2017>

## Third Announcement

July 31, 2017

This is the Third Announcement of the International school and workshop on “Fission Experiments and Theoretical Advances – FIESTA 2017”, Sep. 17-22, 2017. The event will take place in Santa Fe, New Mexico, USA.

### Registration & Abstract Submission

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Registration for the school is now over. Registration for the workshop is **open until Aug. 14, 2017**. You can find the registration information at:

<http://t2.lanl.gov/fiesta2017/workshop.shtml>

The registration fee for the event is **\$350**. You can submit an abstract for an oral/poster presentation at the time of registration, and you will receive a response shortly after the Aug. 14 deadline.

**A few important notes:**

- If you have already registered as a **school attendee**, you are automatically registered for the workshop as well;
- Only registered school attendees can participate in the LANSCE tour on Wednesday, Sep. 20;
- We do expect/encourage workshop participants interested in the lectures to attend them, but mostly as observers;
- At this point, all school attendees should have been asked to provide some additional information in order to be allowed to enter the LANSCE facility. If not, please contact us at your earliest convenience.

## Venue & Accommodation

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The FIESTA school and workshop will take place in the Eldorado Hotel, a few steps away from the Historic Plaza in Santa Fe.



**Eldorado Hotel**

[www.eldoradohotel.com](http://www.eldoradohotel.com)

309 W San Francisco St  
Santa Fe, NM 87501, USA  
(80) 955-4455

A block of rooms has been reserved for the school and workshop participants. Instructions on how to reserve a room is posted on our website. Rooms are available at the special U.S. government rate of 100.00 USD (+ taxes and fees), which is a significant rebate from the regular prices of this very nice hotel, so we are encouraging everyone attending FIESTA to book a room as soon as possible.

## Event Details

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FIESTA 2017 follows our first event organized back in 2014 in Santa Fe, NM. The year 2018 will mark the 80<sup>th</sup> anniversary of the discovery of nuclear fission by Otto Hahn and Fritz Strassmann, whose correct theoretical interpretation came only a few weeks later

by Lise Meitner and her nephew Otto Robert Frisch. This discovery opened up the atomic era, which altered the course of human history.

Almost eighty years later, research in nuclear fission is still central to our understanding of nuclear forces, and a perfect example of a quantum many-body problem. While the qualitative understanding of fission was achieved very quickly after its discovery, an accurate and quantitative modeling of this process remains elusive, while numerous applications, e.g. the nuclear fuel cycle, nonproliferation, global security, stockpile stewardship, space reactors, etc., rely on accurate and detailed fission data.

FIESTA 2017 combines a school, including practical exercises and a visit to experimental facilities at the Los Alamos Neutron Science Center (LANSCE) dedicated to fission research, and a workshop intended to dive into current research activities in the topics covered by the school.

It will again take place at the Eldorado Hotel (<http://www.eldoradohotel.com>) in **Santa Fe, NM, on Sep. 17-22, 2017.**

This time, the event will be organized as follows:

- School Lectures in the morning (3h)
- Practice Sessions (2h) in the afternoon
- Workshop (~2h) in the afternoon/evening

The Sep. 17-22 week will unfold as follows:

- Sep. 17: Welcome & Reception
- Sep. 18-22: School & Workshop
- Sep. 21: Conference dinner

## Agenda

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The agenda, school lecturers, practical session instructors, workshop chairs, and workshop invited speakers are given below:

- Monday, Sep. 18: Fission Cross Sections
  - School lecturers: **W. Younes** (LLNL), **P.W. Lisowski** (LANL)
  - Practical session instructor: **F. Tovesson** (LANL)
  - Workshop chair: **T. Kawano** (LANL)
  - Invited speakers: **N. Bowden** (LLNL), **A. Tsinganis** (CERN)

- Tuesday, Sep. 19: Fission Yields
  - School lecturers: **N. Schunck** (LLNL), **F. Farget** (CNRS)
  - Practical session instructor: **M.E. Gooden** (LANL)
  - Workshop chair: **J. Randrup** (LBNL)
  - Invited speakers: **A. Bulgac** (UW Seattle), **A. Chatillon** (CEA), **S. Chiba** (TiT Tokyo), **A.J. Sierk** (LANL)
  
- Wednesday, Sep. 20: Visit to LANSCE experimental facility
  - fissionTPC, SPIDER, DANCE+NEUANCE, Chi-Nu

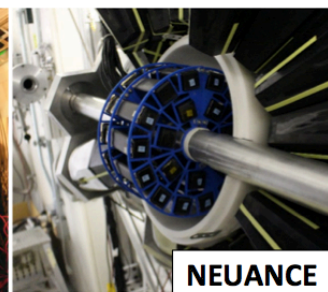
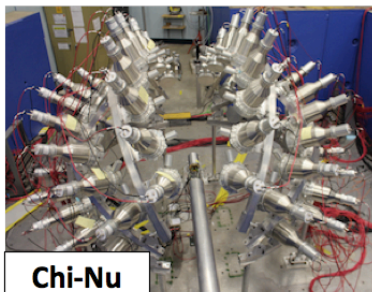
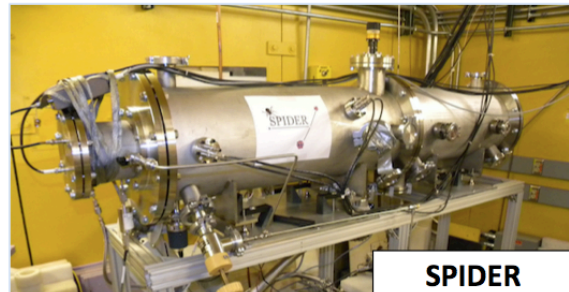
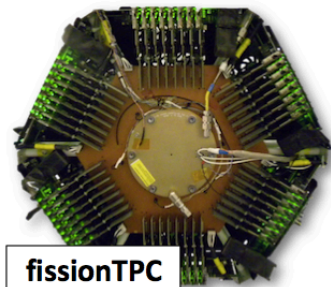
Important note: this visit is available to school attendees only. If you are a school attendee you should have received a separate email requesting some information ahead of your visit. If you haven't provided this information yet, please contact us as soon as possible.
  
- Thursday, Sep. 21: Prompt Fission Neutrons and Gamma Rays
  - School lecturers: **O. Serot** (CEA), **F.-J. Hambsch** (JRC)
  - Practical session instructor: **R. Vogt** (LLNL/UC Davis)
  - Workshop chair: **Y. Danon** (RPI)
  - Invited speakers: **A. Göök\*** (JRC Geel), **H. Makii** (JAEA), **A. Oberstedt** (ELI Bucharest)
  
- Friday, Sep. 22: Fission Applications
  - School lecturers: **J.-C. Sublet** (IAEA), **A. Sood** (LANL)
  - Practical session instructors: **Cameron Bates & Madison Andrews** (LANL)
  - Workshop chair: **Sara Pozzi** (UM)
  - Invited speakers: **E. Bauge** (CEA), **B. Forget** (MIT), **P. Hausladen** (ORNL)

\*to be confirmed.

Each day (except day 3), two school lectures will be delivered in the morning, followed by a practice session using Jupyter notebooks (<http://jupyter.org>) that will be made available to the students ahead of the school. Elementary notions of the Python programming language would be useful but are not necessary. A poster session and workshop event will conclude each day. The daily workshop will cover the theme that has been presented each morning.

Day 3 will be dedicated to a visit of the **Los Alamos Neutron Science Center (LANSCE)** experimental facilities dedicated to nuclear fission research. This visit will include a tour of:

- the **Chi-Nu** detector arrays dedicated to the accurate measure of prompt fission neutron spectra;
- the fission Time Projection Chamber (**fissionTPC**) used to accurately measure neutron-induced fission cross sections and fission fragment angular distributions;
- the **SPIDER** spectrometer developed to perform 2E-2v measurements of fission fragment yields in mass and kinetic energy;
- and finally, the **DANCE+NEUANCE** setup used recently to measure prompt fission neutrons and gamma rays in coincidence.



## Conference Dinner & Speaker

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The conference dinner will be held on Thursday night, Sep. 21, and we are very pleased to announce that **Dr. J. Eric Lynn**, consultant at LANL, will be joining us to speak about his exceptional and lengthy career in nuclear fission research.

## Proceedings, Lecture Notes & Notebooks

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Lecture notes will be provided to all participants before the start of the school.

All practical sessions will be conducted using Jupyter Python notebooks (<http://jupyter.org>), which will be provided to all school participants in due time.

Workshop presentations will be made publicly accessible on our web site. We do not plan to publish any workshop proceedings at this time.

## Scientific Advisory Committee

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- Navin Alahari, GANIL, France
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- Dana L. Duke
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- Brett Manning
- Denise Neudecker
- Gencho Rusev
- Ionel Stetcu

## Key Dates

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First Announcement	March 29, 2017
Second Announcement	April 28, 2017
School Application Forms Due	May 29, 2017
School Application Decisions Sent Out	June 9, 2017
School Registration Deadline	June 23, 2017
Third Announcement	July 31, 2017
Workshop Registration Deadline	August 14, 2017
FIESTA2017	Sep. 17-22, 2017

## Contacts

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If you have any questions regarding the school or/and workshop, please contact us at: [fission2017@lanl.gov](mailto:fission2017@lanl.gov). FIESTA 2017 Website: <http://t2.lanl.gov/fiesta2017>

## Sponsors

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