Chaden Djalali
Tenured Full Professor
Department of Physics & Astronomy
University of South Carolina

EDUCATION

1978	B.S., University of Paris XI, Paris, France
1979	M.S., University of Paris XI, Paris, France (with High Honors)
1981	Ph.D. IPN-Orsay, Paris, France (Adv: Dr. N. Marty)
1984	Post Doctoral degree (These d'Etat), IPN-Orsay, Paris, France (with High Honors)

ACADEMIC OR PROFESSIONAL APPOINTMENTS

1996-	**Professor**, University of South Carolina, Columbia, SC
1992-1996	**Associate Professor**, University of South Carolina, Columbia, SC
1989-1992	**Assistant Professor**, University of South Carolina, Columbia, SC
1988-1989	**Visiting Physicist**, NSCL, Michigan State University.
1987-1992	**Tenured Research Scientist**, IPN-Orsay, France
1985-1987	**Research Associate**, NSCL, Michigan State University (Adv: Dr. G. Crawley)
1981-1985	**Tenured Research Physicist**, IPN-Orsay, France

AFFILIATIONS AND COLLABORATIONS

1986-1989:	Guest Scientist, Los Alamos National Laboratory.
1986-1996	Guest Scientist, Laboratoire National Saturne, Saclay, France.
1989-1995	Guest Scientist, LEGS Collaboration, B. N. L., Upton, NY
1989-present	Member of the CLAS Collaboration, CEBAF/TJNAF, Newport News, VA.
1991-1998	Member of the GRAAL Collaboration, ESRF (GRAAL) Grenoble, France.

HONORS AND AWARDS

1981-1984	**CNRS (French NSF)-Fellow,** Ranked first on national search.
1985	**French CNRS Medal for Outstanding Research in Nuclear Physics by Junior Faculty.**
1997	**USC M.J. Mungo Award for Excellence in Undergraduate Teaching**
1999	**USC Amoco Teaching Award.**
2001	**USC Educational Foundation Research Award for Science, Mathematics and Engineering**
2003	**Carolina Trustee Professorship**
2004	**USC M.J. Mungo Award for Excellence in Graduate Teaching**
2006	**USC Educational Foundation Service Award**

SCIENTIFIC WORK:

Extramural funding 1989-2006:	**> 7.3 Million $**
Articles Refereed in top tier journals:	**114 (*)**
Papers in Conferences and Symposia:	**410 (*)**
Abstracts and short communications:	**307**
PostDoctoral fellows supervised:	**9**
Graduated Students directed:	**15**
Seminars and colloquia:	**40 (*)**

(*): See attached list

RESEARCH GRANTS:

CURRENT:

1. NSF International Plan & Workshops – 0652360 "U.S.-Peru Collaborative Workshop in Nuclear Physics and Its Applications" 1/15/07-1/14/1/08
with co-PI: P. Cole **$32,200**

2. **NSF -** 0555604 "Study of Nuclear Physics with intermediate energy probes" 8/1/06-7/31/09
with co-pi's: D. Tedeschi, R. Gothe and S. Strauch **$1,200,000**

PAST:

1**. NSF -** 0244982 "Study of Nuclear Physics with intermediate energy probes" 4/1/03-3/31/06
with co-pi's: R. Gothe and D. Tedeschi **$900,000**

2. "USC-JLAB Faculty Bridge position" 2005-2006
$66,000

3. **DOE/EPSCoR** "Implementation of the HD target at the Thomas Jefferson National Laboratory" 1/01/02 -12/31/06
with co-pi: D. Tedeschi **$ 440,307**

4. **SURA/JLAB Grant:** "Graduate students stipend/travel supplement" 1999-2005
$71,600

5. **NSF** Western Europ Program - 9981623 **"**U.S.-France Cooperative Research: The Electro and Photoproduction of Vector Mesons at Thomas Jefferson National Accelerator Facility" 4/1/00-3/31/04
co-pi: D. Tedeschi **$18,000**

6. **NSF** International Plan & Workshops - 0527110 "U.S.-Argentina Collaborative Workshop in Nuclear Physics and Its Applications" 9/1/05-9/1/06
with co-Pi: P. Cole **$32,200**

7. **NSF -** 0072361 "Study of Nuclear Physics with intermediate energy probes" 4/1/00-3/31/04
with co-pi: B. M. Preedom , D. Tedeschi and C. S. Whisnant **$1,250,000**

8. **NSF** "Study of Nuclear Physics with intermediate energy probes" 6/1/97-3/31/00
with co-pi's B. M. Preedom , D. Tedeschi and C. S. Whisnant **$900,000**

9. **NSF** - 9404790 "Study of Nuclear Physics with intermediate energy probes"6/1/94-5/31/97
with co-pi: G. Blanpied, B. M. Preedom and C. S. Whisnant **$900,000**

10. **NSF** -9101547 "Study of Nuclear Physics with intermediate energy probes" 6/1/91-5/31/94
with co-pi: G. Blanpied, B. M. Preedom and C. S. Whisnant **$1,067,000**

11. **NSF** Western Europ Program. "US-France cooperative research project" 9/1/89-8/31/91
with co-pi: G. Blanpied, B. M. Preedom and C. S. Whisnant **$10,210**

12. **NSF -** 8906506 "Study of Nuclear Physics with intermediate energy probes" 9/1/89-11/30/91
with co-pi: G. Blanpied, B. M. Preedom and C. S. Whisnant **$483,600**

Teaching Activities

Courses taught

Many different courses have been taught since 1990 at both undergraduate and graduate levels. Up to 2004, advanced graduate level topic courses have been taught at the same time as the large introductory undergraduate Physics courses. Topic courses sequence 745 A, B, C and D was created to give students a good training in real research from the starting bibliographical search to advanced hands on project on existing experiments in National Laboratories. Since 2004, a new Topic course in the Physics of Medical Imaging (PHYS 740) is being offered.

Average enrollment and evaluations of some courses taught at USC

Course Title	Average Enrollment	Average Student Eval .	# semesters
PHYS 721: "Advanced Nucl Physics"	~ 5	<EVALUATION>*=3.81	2
PHYS 213: "Modern Physics Engineers."	~ 25	<EVALUATION>*=3.47	2
PHYS 303: "Modern Physics"	~ 11	<EVALUATION>*=3.73	2
PHYS 201: "General Physics I"	~ 125	<EVALUATION>*=3.56	12
PHYS 202: "General Physics II"	~ 100	<EVALUATION>*= 3.78	4
PHYS 745: "Topic Nucl Physics."	~ 3	<EVALUATION>=NA**	12
PHYS 740: "Medical Imaging."	~ 2	<EVALUATION>=NA**	1

(*) Student evaluations are on a 4.00 scale.
(**) Need al least 4 students for evaluations

Teaching Grants (Funded):

USC "Provost Instructional Development" to implement CAPA (1996)_____**$978**

USC College of Science and Mathematics Computer committee (1997): "Server and printer for CAPA in Physics Undergraduate teaching"_____**$15,000**

USC College of Science and Mathematics Computer committee (1997): "Two servers for LON-CAPA in Physics Undergraduate teaching"_____**$8,000**

2005 LONCAPA workshop held at USC January 2005

Research and teaching supervision

Postdoctoral Scholars supervised	Current position
1989-1991: Dr. C. Steve Whisnant	Faculty member and head of the Physics Department at James Madison University
1990-1991: Dr. Marie-Alix Duval	Faculty member, University of Evry, France
1992-1993: Dr. Dominique Rebreyend	Permanent Scientist at Grenoble Institute of Nuclear and Particle Physics
1992-1994: Dr. April Tam	Broker, Wall Street firm
1994-1998: Dr. Marc Lucas	Senior Lecturer, Ohio University
2000-2004: Dr. Mike Wood	Currently at UMass
2002-2006: Dr. Oleksandr Dzyubak	Staff Scientist, Mayo Clinic in Minnesota
2005-2008: Dr. Rakhsha Nasseripour	Currently USC Postdoc
2006-2009: Dr. Kijun Park	Currently USC Postdoc

Graduate students supervised	Current position
1990-1993: Barry Johnson	Science Editor John Wiley and Sons, NY
1991-1992: Michel Guidal	Permanent researcher, University Paris XI- France
1993-1994: Etienne Burtin	Permanent Scientist, "Centre d'etudes Atomiques", France
1994-1995: Thierry Auger	Permanent Scientist , "Centre d'etudes Atomiques", France
1994-1996: Daniel Pomarede	Permanent Scientist at "Centre d'etudes Atomique", France
1994-1996: Marc Swynghedauw	Started own Software Company, Switzerland.
1995-1997: Sebastien Fabbro	Scientist in Private Sector, USA
1996-1998: Yannick Patois	Professional Engineer in Private Sector, France
1996-2002: Matthew Guillo	Staff Scientist in Nuclear Reactor division, CEA, France
1997-1999: Pascal Girard	Engineer in private sector, France
1999-2001: Alena Parfenova	Scientist in Private Sector, USA
2003-2008: Nicolas Recalde	Medical Physicist at Georgetown Hospital, Washington, DC and PhD candidate at USC
2000-2001: Antoine Cazes	Postdoctoral Fellow with the INFN, Italy
2001-2005: Clarisse Tur	Postdoctoral Fellow at NSCL, Michigan State University
2005-2006: Vladimir Montealegre	Graduate student USC- JLab

Undergraduate students trained in Teaching (Independent studies)

Nancy J Young, Neil A. Jacobs, David L. Frost, Michael S. Jolly, Kenneth A. Pestka, Stephen F. Shafizadeh

Undergraduate students trained in research

Allison Williams, Alison Turkett, Sephanie Sherfinski, Per Sederberg, Tim Kelly, Josie Young, Angela Ashley, Jachelle Garrett, Greg Reese, Travis Garrett, Allyn Powell, Daniel Osbourne, Jackie Wilson, Christine Gibson, Nathan Baltzell.

Training and mentoring of Graduate Students

Research at National Laboratories

All graduate students have learned scientific computing and analysis techniques allowing them to take leading roles in data analysis and hardware development projects at national laboratories. They have been able to make significant contributions to the commissioning and calibration of large detectors. The practical experiences at these laboratories combined with the course work at USC have strenghthen the students' research skills and encouraged them to continue with careers in science and education.
This extended off campus experience has allowed the students to interact with scientists from around the world and to get a first hand account of how "big science " type of research is done in these laboratories.

Student Awards

Since 2000, two of the graduate students (Matthieu Guillo and Clarisse Tur) have been the recipients of the prestigious Southern University Research Association graduate fellowship. They have also won the departmental research award.

Authorship on refereed papers

Since 2000, all the referred papers published have on the average 2 to 3 USC graduate students as authors. This is a tribute to the quality of the work done by these students. The JLab-CLAS collaboration is a large collaboration with many authors. An author name is only added to the list after their contributions to the research has been evaluated as significant.

Talks/posters by students

All graduate students have regularly made presentations at meetings of the American Physical Society and some have also been invited to national and international conferences

Example of some talks and/or posters:

- 2002 National Nuclear Physics Summer School - July 28 to August 10, 2002 in Santa Fe, NM
Talk
- 2003 National Nuclear Physics Summer School - June 15 to 27, 2003 in Knoxville, TN
Talk
- School on the Masses of Hadrons - October 5 to october 10, 2003 in Bad Honnef, Germany
Poster
-Gordon Research Conferences 2003 on Nuclear Physics - July 23 to July 28, 2003 in Waterville, Maine. Poster
-Quarks and Nuclear Physics (QNP2004) International Conference, May 23-28, 2004, Bloomington, IN Talk
-APS spring meeting in Tampa, FL (April 2005),
Invited talk
-AAPM meeting in Orlando, FL(Aug 2006),
Invited talk

MAIN SERVICE ACTIVITIES (Committees)

University:

5/89-8/92	Radiation Safety Committee
1996-1999	Faculty Committe Instructional Development
1999	**Chair** (Mungo Teaching Award Committee)
1999-2002	University Tenure and Promotion Committee **(UCTP Chair in 2001-2002)**
1999-2002	Religious Affairs
1999-2002	President's Prayer Breakfast Committee
1999-2000	**Chair** (Honors College Dean review)
2000-2005	AMOCO Outstanding Teachning Award
2001-2004	Russell Research Award (**Chair in 03-04**)
2001-2002	Grievance Committee
2001-2002	Faculty Senate Steering Committee
2003	USC Research and Productive Scholarship
2003	Merging of Arts and Sciences Committee
2003-2004	Provost Search Committee
2002-2005	Mentor of 1st year Carolina Scholars
2006	Search committee for Chair of Chemical Engineering (**Chair**)

Department/College:

1989-present	Undergraduate Advisor
1989-present	Faculty search (Nuclear, Astronomy, Particle Physics, Nanocenter, etc…)
1994-2000	**Chair** (Undergraduate Curriculum Committee)
1998-present	Executive Committee
2000	Search Committee (Chair of Math Department)
2000-2004	**Director of Graduate Studies**
2000-2004	Graduate Advising Committee
2000-2004	Graduate Admission Committee
2000-2004	Chair (Admission to Candidacy)
2004-present	**Chair of the Department**
2005	**Co-Chair**, Search committee-Endowed professors for BICOE

Student Associations:

1990-present	Student Advisor

Professional:

1990-present	Referee for Physical Review Journal
1994-present	Reviewer for NSF proposals
1997-present	Reviewer of Text books for publishers (McGraw Hill, John Wiley, Cambridge Press,..)
1999-present	Organizing committee for TJNAF section of the 3rd and 4th Latin American Workshops
2000-present	TJNAF Membership committee
2002	Run Coordinator for g7 run
2004-2006	Organizing Cmt 6th Latin American Symposium.
2006	Pegram Award Committee for SESAPS
2006-2008	External Assessor of Physics programs Slutan Al Qabos University Oman
2007	Organizing Cmt 7th Latin American Symposium.

SYNERGISTIC ACTIVITIES

-Initiated and supervised the "revamping" of the recitation sessions in undergraduate physics courses at USC.
-Trained and supervised undergraduate and graduate students in teaching introductory Physics.
-Adopted and introduced the MSU LONCAPA system to USC physics Department.
-Initiate collaboration with European theorists to develop the next round of proposals to JLAB PAC.
-Co-PI on funded USC FEI proposal for a Brain Imaging Center.
-Applied and got funding from NSF (International division) to sponsor graduate students at the VI Latin American international Symposium in Argentina (Oct 2005) and the VII Latin American symposium in Peru (June 2007). Thirteen graduate students attended the Symposium in Argentina (11 of them made presentations). For the sysmposium in Peru, we are planning to take another thirteen graduate students.
-Joined the TREK (Time Reversal Experiment with Kaons) Collaboration at JParc with particle physicists.