CSULA Emeriti Faculty Biography

Name: Demetrius J. Margaziotis

Department: Physics and Astronomy

Academic rank: Professor

Year appointed: 1964 **Year retired**: 2003
FERP years: 2003-08

City of residence: Pacific Palisades, CA

Email and web page: dmargaz@calstatela.edu
http://www.calstatela.edu/faculty/dmargaz/

Birth Place: Athens, Greece

Birth Year: 1938

Marital status: Married **Spouse's name**: Valerie K. Margaziotis

Family information: Sons Ian (wife Heather) and Philip (wife Carmen); granddaughter Chloe, grandson Joaquin

Colleges or Universities Attended:	**Year**	**Degree**
UCLA	1959	B.A. in Physics
UCLA	1961	M.A. in Physics
UCLA	1966	Ph.D. in Physics

Teaching Experience:

Institution	**From**	**To**
Professor, CSULA	1964	2008
Visiting Professor, UCLA	1982	1983

Courses taught:

Introductory physics for science, math and engineering majors (6 courses, with laboratories), introductory physics for life science majors (3 courses, with laboratories), astronomy laboratory, upper division nuclear physics (3 courses), radiation biophysics laboratory, advanced physics laboratory.

Scholarly/Creative Activity:

My research has been in experimental nuclear physics. The objective of this work has been to study, for the most part, the structure and dynamics of "few nucleon systems", i.e. nuclei of very light atoms such as hydrogen, deuterium and helium, as well as to study the substructure of the building blocks of matter, protons and neutrons, in terms of known fundamental particles, quarks and gluons. This type of research increasingly relies on collaborative, large scale experiments carried out by often large international teams of physicists at major laboratory facilities equipped with suitable high energy accelerators. Experimental work and data collection was done at several laboratories including the TRIUMF Cyclotron Laboratory in Vancouver, B.C., Canada, the Bates-MIT Linear Accelerator Center in Boston, the MAMI electron

accelerator at the University of Mainz, Mainz, Germany, the Thomas Jefferson National Accelerator Facility (Jefferson Lab) in Newport News, VA, and others. Aspects of the work such as planning, design, construction and testing of small equipment, data analysis, writing, etc. were done at CSULA. Students were active participants (and fellow travelers) in much of this work. Though a member of a number of different large collaborations, I have worked most closely with professors Martin Epstein and Konrad Aniol, my CSULA colleagues. This work has been possible through continuous and generous grant support by the NSF for over 30 years, and by campus support through department facilities.

Administrative, Business, or Professional Experience (other than teaching):

Agency or Company	**From**	**To**
Assistant Research Physicist, UCLA	1966	1968
Associate Research Physicist, UCLA	1970	1972
Visiting Associate Professor, Institute Ruder Boskovic, Zagreb, Yugoslavia	1972	1972
Visiting Research Physicist, Nucl. Res. Center "Democritos", Athens, Greece	1973	1973
Chair, Department of Physics, CSULA	1973	1976
Executive Officer, Faculty Grievance and Disciplinary Action Panels, CSULA	1976	1984
Chair, Department of Physics and Astronomy, CSULA	1983	1989
Interim Associate Dean, Graduate Studies and Research-Research Administration, CSULA	2002	2003

Awards, Honors, Professional Recognition:

- Outstanding Professor Award, CSULA, l976-77
- Outstanding Teaching Award, Physics Department, UCLA, 1983
- President's Distinguished Professor Award, CSULA, 2000-01
- CSULA Nominee for the CASE-Carnegie Professor of the Year Award, 2000-01
- Inducted into Phi Kappa Phi, CSULA, 2001

Citations of Selected Publications:

- "^{3}He(p,2p)d and ^{3}He(p,pd)p Reactions at Large Recoil Momenta", with M. B. Epstein et al., Physical Review **C32**, 967 (1985).
- "^{2}H(p,2p)n Reaction at 508 MeV: Recoil Momentum > 200 MeV/c", with M. B. Epstein et al., Physical Review **C42**, 510 (1990).
- "G_{Ep}/G_{Mp} Ratio by Polarization Transfer in **e**p $\rightarrow$ e**p**", with M. K. Jones et al., Phys. Rev. Letters **84**, 1398 (2000).
- "Precision Measurement of the Neutron Spin Asymmetry and Spin-Dependent Structure Functions in the Valence Quark Region", with X. Zheng et al., Physical Review **C70**, 065207 (2004).
- "The Quasielastic ^{3}He(e,e'p)d Reaction at Q^2 = 1.5 $(GeV/c)^2$ for Recoil Monenta up to 1 GeV/c", with M. M. Rvachev et al., Physical Review Letters **94**, 192302 (2005).
- "Parity-Violating Electron Scattering from ^{4}He and the Strange Electric Form Factor of the Nucleon", with K. A. Aniol et al., Physical Review Letters **96**, 022003 (2006).
- "Deeply Virtual Compton Scattering off the Neutron", with M. Mazouz et al., Physical Review Letters **99**, 242501 (2007).
- "Probing Cold Dense Nuclear Matter", with R. Subedi et al., Science **320**, 476 (2008).
- "Recoil Polarization Measurements of the Proton Electromagnetic Form Factor Ratio to Q^2 = 8.5 GeV^2", with A. J. R. Puckett et al., Physical Review Letters **104**, 242301 (2010).

- "Measurements of the Electric Form Factor of the Neutron up to $Q^2 = 3.4$ GeV^2 using the Reaction ^{3}**He**(**e**,e'n)pp", with S. Riordan et al., Physical Review Letters **105**, 262302 (2010).

See an expanded list of recent publications on website (above):
http://www.calstatela.edu/faculty/dmargaz/publicat.htm

University Service:

Academic Senate for 26 years; over 20 university level committees including Faculty Policy, Academic Freedom and Professional Ethics, Committee on Committees, Outstanding Professor Awards, Honors Convocation and Commencement, various selection committees and others; over 10 school/college level committees including School Assembly, Faculty Affairs, Academic Recourses, RTP committees, selection committees and others; almost all department level committees.

Personal commentary:

I developed a particular approach to teaching about 10 years prior to my retirement when Don Paulson of the department of Chemistry and Biochemistry and I independently and almost simultaneously were the first ones in our departments to become interested and knowledgeable in the outcomes of recent research whose aim was to improve student learning in core science lecture courses beyond the modest results known to be achievable through the traditional, time-honored, lecture style of instruction. Consequently, and with the assistance of occasional grant support, I introduced in the instruction of the introductory physics course sequence instructional techniques and curriculum based on the findings of physics education research, a largely unknown among physicists area of research done by physicists (and Don did similarly in Chemistry). Initially and for some time, our colleagues in our respective departments were resistant to, if not suspicious of, this new student-centered style of instruction. In more recent years, the practice of actively engaging students in the instruction of science courses has become considerably more prevalent on campus and across the country. Both departments of Chemistry & Biochemistry and Physics & Astronomy have now successfully recruited tenure-track faculty whose specialty is in research related to improving student learning.

I grew up in Athens, Greece. In 1956, after graduating from the Varvakios Protypos School (gymnasium), I came to the US "just to go to college". In graduate school I took part in the effort to build to completion UCLA's 50 MeV Sector-Focused Cyclotron, the first accelerator of its kind to accelerate protons "continuously" to relativistic energies, and then used it in doing my doctoral dissertation work. I came to CSCLA when Franklin Johnson was campus president, Len Mathy was Letters &Science school dean and Don Hudson was physics department chair, and I watched my department grow from 6 tenure track faculty members to its peak of 22 in a span of 6 years. Those were the days! During my first semester (yes, semester!), one of my first service-to-the-department assignments was to help in the design of the then "new" Physical Sciences building. Shortly afterwards, I helped in the conversion from semesters to the quarter system. Years later, I realized it was time to retire when replacement science buildings (La Kretz Hall and Wing B) started to be designed and rumors about converting back to the semester system started again to emerge.

During retirement, I have continued to be in touch with the physics world (including travel to Jefferson Lab to take part in nuclear physics experiments) and university life (e.g. member of the Emeriti Association Executive Committee and webmaster for the Association, member of the Planning Committee for the Honors College, webmaster for my department). I also have been actively enjoying music (going to concerts, and re-learning to play piano), genealogy (regularly augmenting the family tree of my paternal and maternal roots in Greece going back to the 1700's), photography, gadgets, Greek cooking, and traveling, including visiting, climbing and photographing over 300 (so far) lighthouses and their always spectacular locales across the US coastlines and lakes. Most of all, I have enjoyed spending time with my preschooler granddaughter and toddler grandson and watching them grow and grow up.

Date updated: September 2013