

EDUCATION

8]ggYfhUjcb. [Ei Ubh a hfYUha Ybhcz]bhYfa i 'hd'YhfUbg]h]cbg Xi f]b[BY* (2d⁵ 3p) + He collisions
Uh\Yfa U' YbYf[m Dc`Uf]nUjcb YZYWg.]bhYfdFYhUjcb cZYI dYf]a Ybtrg.]
Honors: Dissertation passed with the Distinction: [7cb[fUhi `Uh]cbg cZh\Y ↑ fm]

H\Yg]g. [UgYf dfcXi WX-plasma on Aluminum targets using radiation from a CO₂ UgYf]

Areas of Concentration: Atomic, Molecular, Optical, and Laser Physics

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ACADEMIC AWARDS

TEACHING EXPERIENCE

Undergraduate: College Physics,

scratch a laboratory facility for the Optics course; Leading honors thesis (Joey Hunt).]

[Development of courses and labs in physics.]

[Teaching physics labs and one course Modern Physics.]

Teaching recitations at the University Physics and College Physics levels.

- teaching recitations

- Development of on-line material. Please see the <http://sethi.lamar.edu/bahrim-cristian/cristian.html>.
- Peer-instruction as part of the STAIRSTEP sponsored program.
- I led more than 100 honors projects (contracts/thesis) while at Lamar.
- Faculty Collaborative for the College Career Readiness Initiative in Texas.
- Co-organizer of educational workshops. For example: (1) the workshops

ACADEMIC ADMINISTRATIVE & RELATED HIGHER EDUCATION EXPERIENCE

- Co-supervisor (with Dr. Rafi Tadmor, from Chem E) of one Ph.D. candidate in Chem. Engr., Mr. Ken Pepper. Ph.D. degree awarded in December 2015;
- Advisor of the Ph.D. candidate Hiraku Matsukuma from Kyoto University,

Physical Society: given at other meetings than those organized by the American



held in New Orleans (Sep. 11, 2015): Talk [7ci d]b[two lasers on

- ___ Doerschuk, P., Bahrim, C., Daniel, J., Kruger, J., Mann, J., and Martin, C., "STAIRSTEP: An interdisciplinary program for retention and outreach in STEM," October 2011, pp.F4H-1 to F4H-6, doi: 10.1109/FIE.2011.6142757 (A peer reviewed international conference paper).
- ___ Matsukuma H., Bahrim, C., G\]_Ua U H., UbX <Ugi c A., [8Ydc`Uf]nUh]cb cZYa]gg]cb `]bYg Zfca dc`Uf]nYX bYcb 2d10 atoms due to radiation re-UVgcfdh]cb]b [`ck X]gV\Uf[Y d`Uga U], (ISBN 2-914771-62-2) of 37th EPS Conference on Plasma Physics (Dublin, Ireland 2010) paper P4.408 (4 pages) (see <http://ocs.ciemat.es/EPS2010PAP/pdf/P4.408.pdf>)
- ___ Khadiilkar V., and Bahrim, C., [8]gcf]YbhUh]cb cZBY*(2d_i;J =1) atoms due to He atom collisions in glow discharges at 10 K <T O 3000 ?I, , art# 235209 (2010).
- ___ Prigmore, J., Tcheslavski, G., and Bahrim, C., "An IGCT-based Electronic Circuit Breaker design for a 12.47kv distribution system," pp.1-5 (5 pages) doi: 10.1109/PES.2010.5588055 (<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5588055>)
- ___ Bahrim, C., UbX ?\UX]_Uf J., [5]] ba YbhFY`Ul Uh]cb cZBY*(2p_i [J=1]) atoms induced by collisions with He(1s²) Urc a g]b X]gV\Uf[Yg UhY a dYfUh fYg Zfca 10 hc 3000 ?I, , art# 042715 (2009).
- ___ Bahrim, C., and Hsu W.-H., [DFYW]gY a YUgi rement of the refractive indices for dielectrics using an improved 6fYk ghYf Ub[`Y a Yh.cX], , (4), pp. 337-343 (2009).
- ___ Matsukuma H., Bahrim, C., UbX <Ugi c A., [8Ydc`Uf]nUh]cb cZYI W]hYX BY* (2d⁵3p; J=1) atoms due to He atom Wt`]g]cbg], , pp. 169-173 (2009)
- ___ Hsu W.-T. and Bahrim, C., [5VWVfUH] a YUgi fYa Ybhg cZfY ZFUW]j Y]bX]Wg Zc f X]Y`YWf]Vg]b Ub undergraduate optics laboratory for science and Yb[]bYf]b[ghi XYbhg], pp. 1325-1336 (2009).
- ___ Doerschuk, P.; Bahrim, C.; Daniel, J.; Kruger, J.; Mann, J.; Martin, C., "Work in progress - STAIRSTEP - a program for YI dUbX]b[h`Y ghi XYbh d]dY`]bY, I 2, doi: 10.1109/FIE.2009.5350566.
- Bahrim C., ?\UX]_Uf J., A Uhgj _i a U <, UbX <Ugi c A., [5]] ba YbhFY`Ul Uh]cb cZBY* (2d_i

art# 022722 (2000).

— Bahrim C., Hennecart D., Kucal H. and Masnou-GYYi k g : ., [@cb[]hi X]bU' U][ba YbhHfUbgZyf VYrk YYb Z]bY gHfi Wfi fY
levels in Ne* (2p⁵)

24. Bahrim C, and

40. with Keeley Townley-Smith (physics/EE major) and Gillian Nave (Researcher at NIST) [@YUfb]b[UVci h the composition of stars and atomic structure through gdYVWfcgVc dmf. This UG conference is organized by the Office of UG Research.
41. Galveston (March 2014) with Vogler S. (physics/MA major) and Townley-Smith K. (physics/EE major) [5bU'mg]g of Lorentzian peaks in atomic UVgcfdh]cb gdYVWfU UbX g\UdYg cZ[`ck]b[cV^YVWg Zfca h\Y dc`Uf]nUq]cb cZ`][\hYa]HXYI.
- (March 2014) with Sara-jeanne Vogler (d\mj]Wj/A 5 a U'cf) [8cbB; Yh6i fbYX! DfchVW]cb Zfca =7A 9 FY`UHYX G9D 9j Ybfg]b =bhYfd`UbYHJfmGdUWfI H\]g I ; VcbZYfYbWf]g gdcbgcfYX VmH\Y B5G5 GWYbWf A]gg]cb 8]fYVWcfUHY and Lunar and Planetary Institute.
43. (April 2014) with Keeley-Townley Smith (physics/EE major) [9a]gg]cb and Absorption Spectroscopy and Polarimetry of Glowing Objects in

a U'c'f) [@[\h-a Uhh'f]bh'fUW]cbI.

56. organized

thermiques et superthermiques], 6U\fa 7., ?i W' <. UbX A Ugbci -Seeuws F, Proceedings.

[Collision Ne* + He (quantum treatment)], 6U\fa 7., ?i W' <. UbX A Ugbci -Seeuws F, Proceedings.

[Population and Alignment Transfer between the Levels of the 2p⁵3p Ne Configuration in Collision with Rare Gases], 6U\fa 7., A Ugbci -Seeuws F., Kucal H. and Dulieu O, Proceedings.

[CO₂ -TE Laser Produced Cadmium Plasma in Vacuum: Experiment and Kinetics], 5dcgrc` =, 6U\fa 6., 6U\fa C. and Vasilescu C., Contributed Papers, Part III pp. 2049.

[Elementary Processes in Laser Produced Aluminum Plasma], 6U\fa 7. UbX GW\by]XYf =: ., Proceedings.