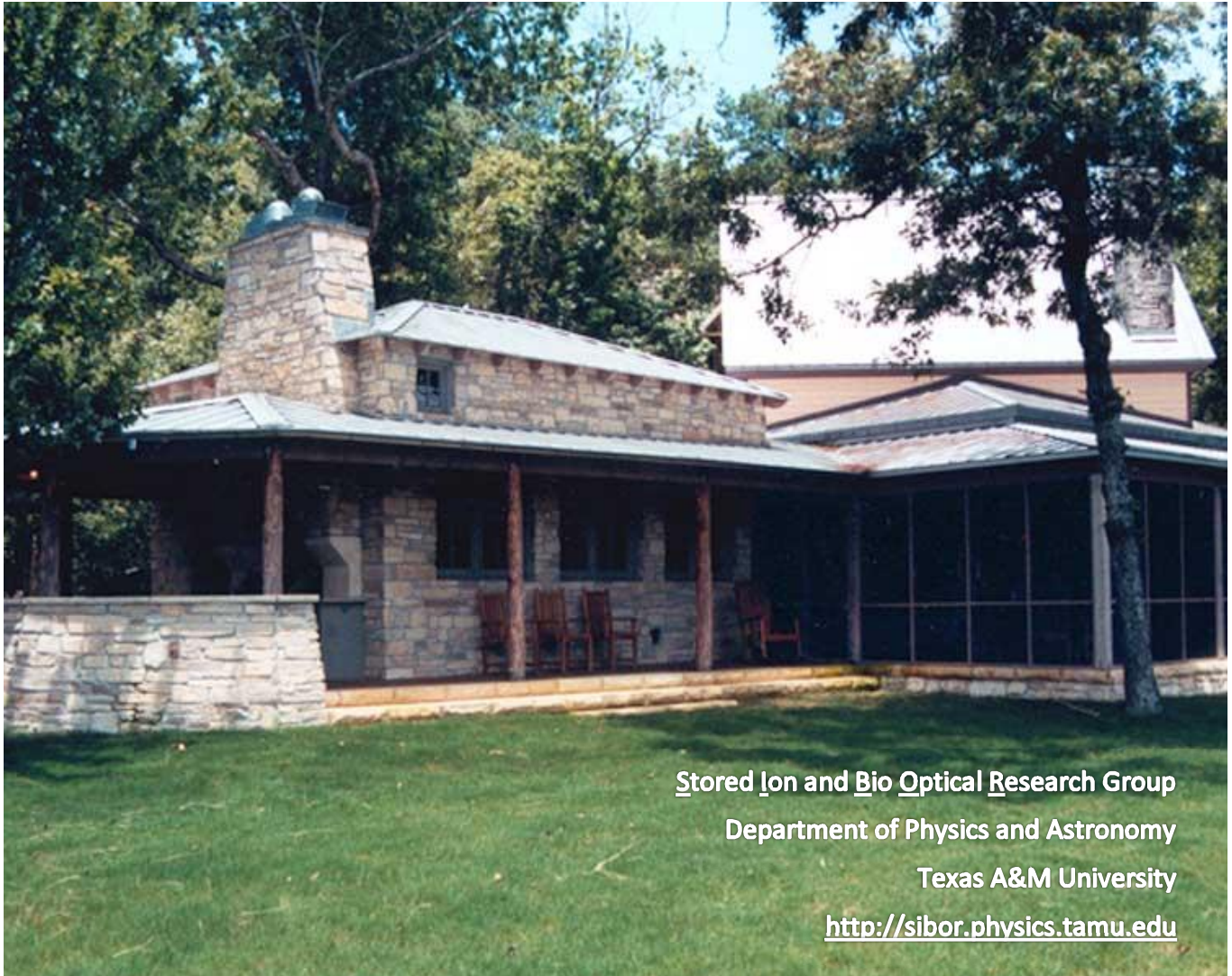


Cook's Branch

SIBOR – Workshop

Thursday June 7, 2012

Program



Stored Ion and Bio Optical Research Group

Department of Physics and Astronomy

Texas A&M University

<http://sibor.physics.tamu.edu>

Until 10:00 a.m.	Travel to Cook's Branch
10:00 – 10:25	Prof. Steve Dimarco Oceanography, TAMU Dead zones in the northern Gulf of Mexico
10:30 – 10:55	Prof. Lifan Wang Physics and Astronomy, TAMU Optical Astronomy at dome A, Antarctica
11:00 – 11:25	Prof. Lothar Frommhold Physics, UT Austin Supermolecular Opacities for Astrophysics
11:30 – 11:55	Prof. Hans Schuessler Physics and Astronomy, TAMU Frequency comb lasers for Astrophysics
12:15	Workshop Photograph
12:30	Lunch
14:00 – 14:25	Prof. Ed Fry Physics and Astronomy, TAMU Integrated Cavity Spectroscopy
14:30 – 14:55	Dr. James Strohaber Physics and Astronomy, TAMU Polarization gating for attosecond physics
15:00 – 15:25	Prof. Hartmut Schroeder Max Planck Institute of Quantum Optics, Garching Diffraction and focusing of few cycle laser pulses
15:30 – 15:55	Prof. Dmitri Lapotko Rice University Plasmonic nanobubbles: Nanoscale starwars against cancer
16:00 – 16:05	Coffee break
16:10 – 17:00	Poster Session
17:05 – 18:00	Explore Cooks Branch and find the red woodpecker
18:05	Dinner
20:00	Departure

We thank Sheridan Lorenz and George Mitchell and the Mitchell Foundation for hosting this workshop.

Posters

Coherent transfer of optical orbital angular momentum in Raman sideband generation

J. Strohaber, M. Zhi, A. A. Kolomenskii, A. Sokolov, G. G. Paulus and H. A. Schuessler

Laser spectroscopy of the radioactive La isotopes

H. Iimura, F. Buchinger, and H. A. Schuessler

In situ tomography of femtosecond optical beams with a holographic knife-edge

J. Strohaber, G. Kaya, N. Kaya, N. Hart, A. A. Kolomenskii, G. G. Paulus and H. A. Schuessler

White-light generation using spatially-structured beams of femtosecond radiation

N. Kaya, J. Strohaber, H. Schroeder, A. A. Kolomenskii, G. Kaya, G. G. Paulus, and H. A. Schuessler

Dual frequency comb spectroscopy in the near IR

F. Zhu, T. Mohamed, J. Strohaber, A. A. Kolomenskii, and H. A. Schuessler

Multipass cell with confocal mirrors for sensitive broadband laser spectroscopy in the near IR

T. Mohamed, F. Zhu, J. Strohaber, A. A. Kolomenskii, and H. A. Schuessler

Intensity-resolved above threshold ionization yields obtained with femtosecond laser pulses

N. Hart, J. Strohaber, G. Kaya, A. A. Kolomenskii, G. G. Paulus and H. A. Schuessler

Control of high harmonic generation by wave front shaping

A. A. Kolomenskii, M. Sayraç, E. Cook, J. Wood, R. Nava, J. Strohaber, G. G. Paulus and H. A. Schuessler

Measuring krypton tracers in well gas with ultra sensitive collinear fast beam laser spectroscopy

T. Mohamed, R. Nava, M. Fahes, H. Nasrabadi, K. Okada, M. Wada, H. A. Schuessler

Measurement of methane and carbon dioxide concentrations in sea waters

J. Strohaber, F. Zhu, R. Nava, T. Mohamed, A. A. Kolomenski, H. A. Schuessler

Interaction of femtosecond laser pulses with metal nanostructure: Resonances and light modulation

A. A. Kolomenski, S. Zhrebtsov, R. Mueller, S. Peng, J. Strohaber, H. A. Schuessler

Krypton Separation from Ambient Air for Application in Collinear Fast Beam Laser Spectroscopy

T. Mohamed, J. Strohaber, R. Nava, A. A. Kolomenskii, N. Thonnard, H. A. Schuessler

Development of a Phase-Coherent Laser System for Attosecond Science at Precision Spectroscopy

G. G. Paulus, A. V. Sokolov, A. A. Kolomenski, H. A. Schuessler

Precision measurements on Ar⁺ with collinear laser spectroscopy

V. Lioubimov, M. Wada, H. Iimura, K. Okada, Y. Yamazaki, H. A. Schuessler