

Abstract Submitted  
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**Time-resolved Ultrafast Spectroscopy Experiments on High Temperature Superconductor Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub>** JIANQIAO MENG, Condensed Matter and Magnet Science, Materials Physics and Applications Division, Los Alamos National Laboratory, Los Alamos NM, 87545, GEORGI L. DAKOVSKI, SLAC National Accelerator Laboratory, Menlo Park, CA 94025-7015, USA, JIANXIN ZHU, Physics of Condensed Matter and Complex Systems, Theoretical Division, Los Alamos National Laboratory, Los Alamos NM, 87545, USA, PETER S. RISEBOROUGH, Department of Physics, Temple University - Philadelphia, PA 19122, USA, GENDA GU, Condensed Matter Physics & Materials Science, Brookhaven National Laboratory, Upton, NY 11973, USA, STEVE M. GILBERTSON, GEORGE RODRIGUEZ, JINGBO QI, ANTOINETTE TAYLOR, Center for Integrated Nanotechnologies, Materials Physics and Applications Division, Los Alamos National Laboratory, Los Alamos NM, 87545, USA, TOMASZ DURAKIEWICZ, Condensed Matter and Magnet Science, Materials Physics and Applications Division, Los Alamos National Laboratory, Los Alamos NM, 87545 — Time-resolved ultrafast spectroscopy experiments have been carried out on various dopings of high temperature superconductor Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub>. In this talk, we will report our observation and analysis of ultrafast dynamics in Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub>, with special emphasis on the quasiparticle dynamics in the pseudogap and SC gap regimes.

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