



Illinois Wesleyan University
Digital Commons @ IWU

John Wesley Powell Student Research
Conference

2007, 18th Annual JWP Conference

Apr 14th, 9:00 AM - 10:00 AM

Investigation of Laser-Induced Breakdown in Air

Rob Inzinga, '07

Illinois Wesleyan University

William Brandon, Faculty Advisor

Illinois Wesleyan University

Follow this and additional works at: <https://digitalcommons.iwu.edu/jwprc>

Inzinga, '07, Rob and Brandon, Faculty Advisor, William, "Investigation of Laser-Induced Breakdown in Air" (2007). *John Wesley Powell Student Research Conference*. 34. <https://digitalcommons.iwu.edu/jwprc/2007/posters/34>

This Event is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Poster Presentation P43

INVESTIGATION OF LASER-INDUCED BREAKDOWN IN AIR

Rob Inzinga and William Brandon*

Physics Department, Illinois Wesleyan University

Here we investigate some properties of laser-induced optical breakdown. Focusing a Q-switched YAG laser in air generated the breakdown, as manifested through the formation of a visible plasma spark. Some of the properties we studied included the angular distribution of the scattered laser light, plasma temperature, and plasma evolution. In particular, we have obtained angular distributions from time averaged frequency resolved measurements involving simultaneous scattering of the three YAG harmonics at 1064nm, 532nm, and 355nm.