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**Optogalvanic transients in a neon discharge plasma** NAVEED PIRACHA, John Carroll University, OH 44118, RYAN FEAVER, John Carroll University, TARIQ GILANI, Millersville University, PA 17551 — Time dependent optogalvanic signals induced by the  $1s_4$ - $2p_n$  laser excitations have been studied in the neon DC plasma. The decay rates related to all the four 1s levels have been derived by fitting the waveforms with a mathematical rate equation model. The temporal signatures of the two transitions namely 638 nm and 650 nm related to the  $2p_7$ and  $2p_8$  upper levels, respectively, have been found different from the rest of the transitions.

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