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Collisional mechanism and the temporal evolution of neon optogalvanic signals KURT NESBETT, STEFANIE MAROTTA, NAVEED PIRACHA, Department of Physics, John Carroll University, University Heights, OH-44118 — We report on the temporal evolution of the optogalvanic signal in neon gas using a commercial hollow cathode lamp in conjunction with a Nd:YAG pumped dye laser system. We have recorded at least 3 transitions excited from each of the neon 1s levels. These transitions are recorded for a range of discharge current to study the decay rates of these states. We have found a linear relationship between the decay rates and the discharge current.

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