Modeling Neutron Transport for MagLIF experiments at the Z Facility using Attila and MCNP MICHAEL MANGAN, Sandia National Laboratories, GREGORY FAILLA, Silver Fir Software, Inc. — For inertial confinement fusion experiments, the neutron yields is an important metric of the experiment. Accurately inferring neutron yields in experiments conducted at the Z facility is a difficult problem that requires understanding the neutron transport in a complex experimental assembly. In this, we demonstrate the utility of using Attila to develop a detailed geometrical model of MagLIF load hardware for neutron transport modeling in MCNP. SNL is managed and operated by NTESS under DOE NNSA contract DE-NA0003525.

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