Canadian Association of Physicists
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Contribution ID: **386** Type: **Oral Competition (Graduate Student) / Compétition orale (Étudiant(e) du 2e ou 3e cycle)**

(G*) Parameter estimation of gravitational waves over non-Gaussian transient noise

Monday 7 June 2021 13:30 (10 minutes)

The Laser Interferometer Gravitational-Wave Observatory (LIGO) is expected to begin its fourth observing run in 2022, with a large projected improvement in detector sensitivity. This sensitivity boost increases the gravitational wave (GW) detection rate, but also increases the likelihood of GW events overlapping with transient, non-Gaussian detector noise, or glitches. This project aims to quantify how GW parameter estimation is affected by simultaneous glitch noise, particularly with regards to salvaging inspiral masses and sky location for electromagnetic follow-up of GW candidates.

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