



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

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Type: **Invited Speaker / Conférencier(ère) invité(e)**

(I) Hunting for new particles at TRIUMF with the DarkLight experiment

Tuesday 7 June 2022 13:30 (25 minutes)

The nature of dark matter and its relationship to the Standard Model is one of the highest priority open questions in particle physics today. Accelerator-based experiments are a powerful tool in the search for dark matter and the new bosons that may mediate its interactions with the known particles. The DarkLight experiment will search for such a new boson with preferential couplings to leptons in an important uncovered mass range. DarkLight will be based at the TRIUMF e-linac, and this project includes planned upgrades to the accelerator that will both increase its energy and make it accessible to other future experiments.

Session Classification: T3-3 New Directions in Accelerator-Based Experiments: Future Experiments at TRIUMF and Brookhaven (PPD) | Nouvelles voies fondées sur des accélérateurs: expériences futures à TRIUMF et Brookhaven (PPD)

Track Classification: Symposia Day (Tues. June 7) / Journée de symposiums (mardi, le 7 juin): Symposia Day (PPD) - New Directions in Accelerator-Based Experiments