



**Canadian Nuclear Society
Société Nucléaire Canadienne
Ottawa Branch**

**Subduction for permanent disposal of
highly radioactive nuclear waste**

**by
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Subduction, the slow natural submersion of oceanic plates beneath continental plates of the earth, appears to be an ideal approach for permanent disposal of highly radioactive nuclear waste. A single borehole 3 ft in diameter and 1 km deep, drilled into the oceanic Juan de Fuca plate at the Cascadia subduction zone about 100 km west of Vancouver Island, would cost \$21 million and would only be half-filled with the total spent uranium fuel produced in Canada in one year, less so with true waste, with ample space for cladding and capping. The waste then submerges at 5cm/year with the oceanic plate underneath the North American continent, with its radioactivity decaying, untouched and inaccessible, for millions of years. Financial costs are borne up front, and no hazardous legacy is passed to future generations. Moreover no new sites for permanent disposal are necessary in future, since a fresh site is created at the subduction zone as filled boreholes pass under the continental crust.

Date: **Wednesday, September 24**
Time: 7:00 pm.
Location Air Force Mess (Astra Lounge, Main Floor)
158 Gloucester St. (between Bank and O'Connor)

Cash bar available.

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- ALL WELCOME -