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## COMMERCIAL WATER HOSES TO TRANSPORT ULTRACOLD AND VERY COLD NEUTRONS\* AND THEIR APPLICATION IN A RECENT NEUTRON LIFETIME EXPERIMENT

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Commercial water hoses with 6 to 8 mm inner diameter (flexible tubes made of a polyvinyl chloride plastic up to 3 m length) transmit surprisingly well ultracold and very cold neutrons. When covered with a thin layer of a liquid fluorine polymer a transmission probability of up to 85% per meter has been measured. Those flexible tubes may be used to make portable sources of ultracold and thermal neutrons.

They have been successfully used in the calibration of thermal neutron counters surrounding the storage volume of a recent neutron lifetime experiment. Preliminary results on this calibration and the neutron lifetime are presented.

- Russian patent

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