Abstract Submitted
for the DNP19 Meeting of
The American Physical Society

Probing SRC in Inverse Kinematics GORAN JOHANSSON, Tel Aviv University, SRC@BMN COLLABORATION — Short Range Correlated (SRC) pairs are two close nucleons in the atomic nucleus. The SRC pairs are usually composed of a proton and a neutron, and have high individual and relative momentum but low common center of mass momentum. Low and high are in comparison with the nuclear Fermi momentum. The SRC pairs dominates the high tail of the nucleon momentum distribution. In the last decade the experimental SRC research was done using high energy electrons and protons to search for the pairs and study the properties of the nucleons in the pair. We present here an experiment with a new approach to study SRC in *inverse kinematic* using a ^{12}C beam of 4 GeV/c/u aiming at a liquid H_2 target. This allows a *fully-exclusive* measurement including the detection and studying of the residual A-2 nuclear system, after the 2N-SRC knockout. First measurement was done during spring 2018 in the BM@N nuclotron at the Joint Institute of Nuclear Research (JINR), Dubna, Russia. In this talk we will present some new preliminary results from that measurement.

Goran Johansson
Tel Aviv University

Date submitted: 02 Jul 2019 Electronic form version 1.4