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MEASUREMENT OF THE NEUTRON TIMELIKE ELECTROMAGNETIC FORM FACTOR AT THE VEPP-2000 e+e- COLLIDER WITH THE SND DETECTOR

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The e+e--> n+anti-n cross section has been measured in the experiment at the VEPP-2000 e+e- collider with the SND detector. The technique of the time measurements in the multichannel NaI(Tl) electromagnetic calorimeter is used to select n+anti-n events. The measured value of the cross section in the energy range from the threshold up to 2 GeV is of order of 0.5 nanobarn, what corresponds to the neutron timelike form-factor ~0.3. The presented work is supported by the RFBR grant No. 18-02-00147a.

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