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Asymmetric neutron emissions from sonicated steel

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Following up published works in which we studied and experimentally verified the assumptions of the theory of "Deformed Space-Time" in relation to piezonuclear emissions, and according to previous experiments of sonication by ultrasounds performed on solid materials with high density, cylindrical bars of AISI 304 steel have been sonicated by ultrasounds of the power of 330 Watts and frequency of 20 KHz. We verified by means of passive detectors CR39 (PADC) pulsed emissions of neutrons. In this work, following a recent proposal, it was decided to perform a stereoscopic measurement of neutron emission. It has been verified that they are characterized by a distribution which is anisotropic and asymmetric in the space. The work shows a wide and accurate description of the experiment and the results of neutron emissions, and we stress that there exist two directions corresponding to maximum emission (maximum dose) and zero emission (null dose).

Keywords: Neutron emission; asymmetry; anisotropy; piezonuclear; deformed space-time.

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