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Constraining Properties of Dark Matter particles Using Astrophysical Data

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List of Publications

Constraints on decaying dark matter from XMM-Newton observations of M31
A. Boyarsky, D. Iakubovskyi, O. Ruchayskiy and V. Savchenko
Monthly Notices of the Royal Astronomical Society **387** 1361-1373 (2008).

A lower bound on the mass of dark matter particles
A. Boyarsky, O. Ruchayskiy and D. Iakubovskyi
Journal of Cosmology and Astro-Particle Physics **03** 005 (2009).

New evidence for dark matter
A. Boyarsky, O. Ruchayskiy, D. Iakubovskyi, A. V. Macciò and D. Malyshev
arXiv:0911.1774, **to appear**.

Searching for dark matter in X-rays: how to check the dark matter origin of a spectral feature
A. Boyarsky, O. Ruchayskiy, D. Iakubovskyi, M. G. Walker, S. Riemer-Sørensen and S. H. Hansen
Monthly Notices of the Royal Astronomical Society **407** 1188-1202 (2010) — arXiv:1001.0644.

Next decade of sterile neutrino studies
A. Boyarsky, D. Iakubovskyi, O. Ruchayskiy
Physics of the Dark Universe, **1** 136-154 (2012).

Searching for decaying dark matter in stacked spectra of nearby galaxies observed with XMM-Newton
A. Boyarsky, D. Iakubovskyi, O. Ruchayskiy, **to appear**.

Curriculum vitae

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EDUCATION

Jun. 2004: M.Sc. in Physics at Taras Shevchenko National University of Kyiv
Cosmological solutions in theories with one brane
Supervisor: Dr. Yuri Shtanov.

Jun. 2003: B.Sc. in Physics at Taras Shevchenko National University of Kyiv
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Jun. 1999: High School Diploma at Ukrainian Lyceum of Physics and Mathematics (Kiev, Ukraine).

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