



"El saber de mis hijos
hará mi grandeza"

Universidad de Sonora



Nombre: Dr. Antón Lipovka

Grado: Profesor Investigador Titular C

Formación académica: 1994 PhD. en Ciencias Exactas y Naturales (Física y Matemáticas). Special Astrophysical Observatory. 1990 Magistratura en Ciencias Exactas y Naturales. Universidad Politécnica de San Petersburgo.

Experiencia laboral / profesional:

- 2019-2022 The problem of Dark Matter in galaxies (the problem of rotation curves) has been solved. Dark Matter is not required to explain the rotation curves. **Published:** Anton A. Lipovka. (2022) "Gas kinetics of galactic disks explains rotation curves of S-type galaxies without a need for dark matter." *International Journal of Modern Physics A*, v.37, No. 27, 2250171
<https://doi.org/10.1142/S0217751X22501718>
- 2013-2018 General Relativity and Quantum Mechanics (QM) were unified. Planck's constant was calculated from first principles, as an adiabatic invariant of the free electromagnetic field, propagating in the expanding universe. Foundations of QM were revealed. Complete electrodynamic equations were derived to describe any system (quantum, classical, relativistic). The physical meaning of wave functions was explained. The Aharonov-Bohm effect was explained for the first time. **Published:** (i) Anton A. Lipovka (2017) "Physics on the Adiabatically Changed Finslerian Manifold and Cosmology." *Journal of Applied Mathematics and Physics*, 5, 582-595. doi: 10.4236/jamp.2017.53050.
https://file.scirp.org/pdf/JAMP_2017030814454579.pdf (ii) Ivan A. Cardenas & Anton A. Lipovka (2019) "Variation of the fine-structure constant caused by expansion of the Universe." *Modern Physics Letters A* Vol. 34, No. 38, 1950315 <https://doi.org/10.1142/S0217732319503152>
- **Details:** <https://lipovka.me/>

Publicaciones: Más de 90 artículos publicados y capítulos en libros.

Docencia: 35 cursos impartidos, todos son de nivel de posgrado.

Dirección de tesis: Doctorado: 5, maestría: 5, licenciatura: 1.

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