



The issue 426 (April 2013) of the magazine Pour la Science, the French edition of Scientific American, is devoted to a lengthy article on dark stars. It is written by Katherine Freese (University of Michigan, USA), Paolo Gondolo (University of Utah, USA) and our colleague Pierre Salati.

Several measurements in astrophysics and cosmology indicate the presence of a new type of matter, dark matter. Dark matter represents no less than 85% of the matter content of the Universe. The most plausible hypothesis is that dark matter consists of new, electrically neutral and weakly interacting particles.

Many theories describing physics beyond the standard model of particle physics incorporate dark matter candidates. Dark stars, that are, oddly enough, brighter than a thousand suns, draw their energy from the annihilation of these dark matter candidates.