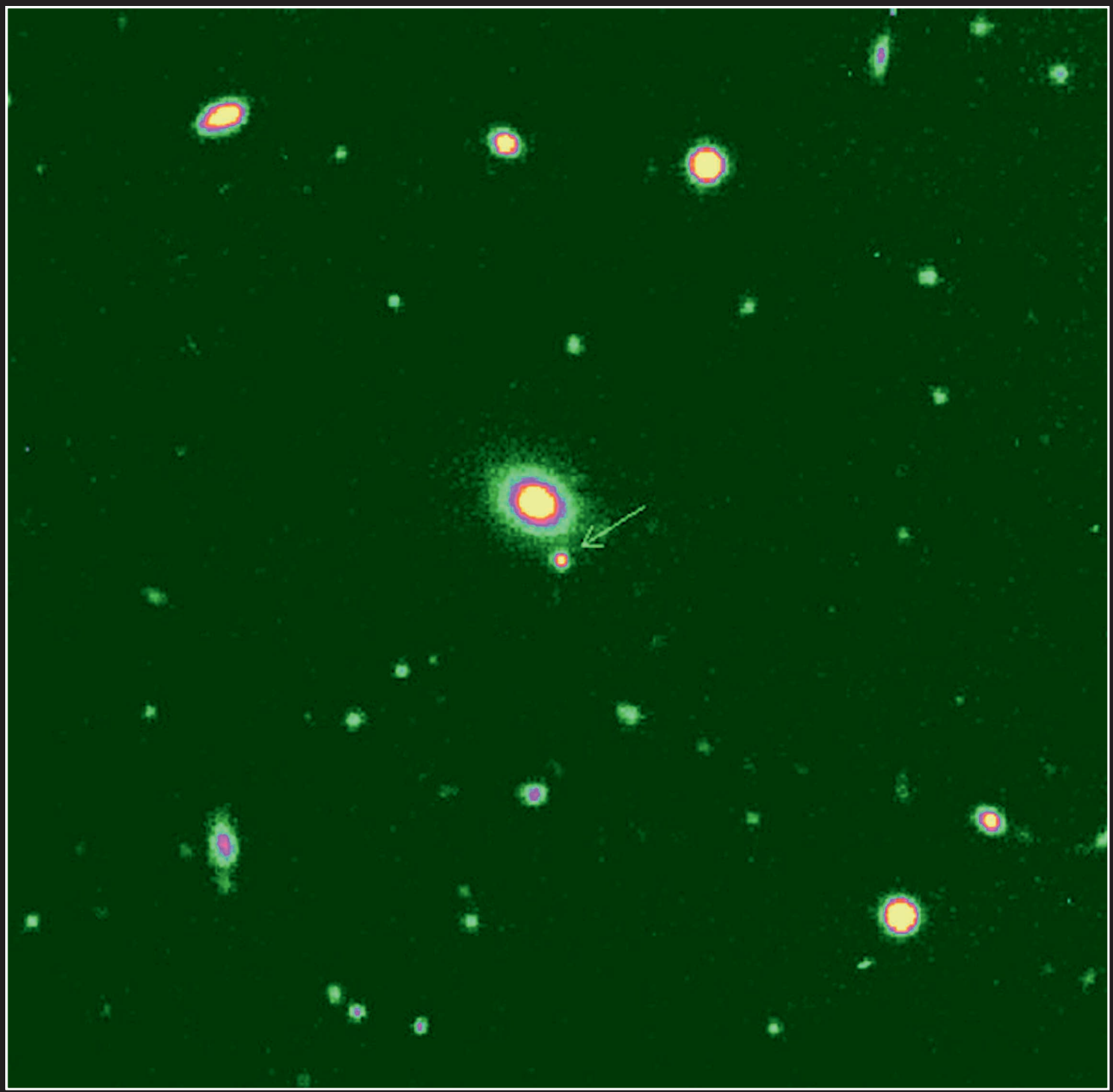
A High-z Supernova



Isaac Newton Telescope + Wide Field CCD Camera

New studies based on observations of supernovae in the farthest reaches of deep space indicate that the universe will expand forever because there isn't enough mass in the universe for its gravity to slow the expansion, which started with the Big Bang. The image shown above was taken using the Isaac Newton Telescope and it corresponds to a high-redshift type Ia supernova thousands of millions of light years away. When a star explodes as a type Ia supernova its brightness is similar to the host galaxy. This latter feature along with the possibility of calibrating their maximum brightness, make type Ia supernovae the best known standard candles to investigate the geometry and the dynamics of our universe.

Credit: Javier Méndez (ING).

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