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Abstract for an Invited Paper
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Probing Supernova Remnants, Black Holes, and Dark Matter with TeV Gamma Rays

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I will discuss the recent exciting discoveries of TeV gamma-rays from objects representing several galactic and extragalactic source populations, and highlight the astrophysical and cosmological implications of these discoveries in the context of (1) the century-old problem of origin of Galactic Cosmic Rays, (2) Physics and Astrophysics of Black Holes, and (3) cosmological problems related to the Diffuse Extragalactic Background Radiation as well as to the nonbaryonic Dark Matter.