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Abstract for an Invited Paper
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Phenomenology of Beyond the Standard Model[1]

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In this talk, we give an overview of the recent developments in the exploration of particle physics beyond the Standard Model. We will highlight the special role of the Higgs particle in unveiling the presence of new physics. The existence of dark matter is a clear evidence for physics beyond the Standard Model, but the particle nature of dark matter remains unknown. Dark matter might be a hint for the existence of a dark sector of particles not interacting through the known Standard Model interactions, as also motivated by other open problems in particle physics, such as the strong CP problem and the matter-antimatter asymmetry problem. We will discuss classes of dark sector theories, and emphasize how new measurements can be devised to search for these candidates. Finally, recent developments in the field of flavor physics will also be covered.

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