



## Dark Matter Annihilation

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### Message from the Guest Editor

Dear Colleagues,

Observations indicate the existence of missing mass in our universe. The concept of dark matter has been invoked to represent the unknown missing mass. Many possible new particles have been proposed to be the candidates of dark matter. Some of the models suggest that dark matter particles can self-annihilate to give high-energy photons, electrons, positrons and neutrinos. If dark matter can self-annihilate, it is possible for us to observe dark matter indirectly and constrain its properties. Therefore, gamma-ray observations, x-ray observations, positron observations, anti-proton observations, neutrino observations and radio observations are possible ways to constrain dark matter. This Special Issue will explore this particular area of study. It includes a discussion and review of dark matter annihilation, constraints of annihilating dark matter by observational data, the modelling of dark matter annihilation, and other related issues. We anticipate that these studies will provide a good summary for this Special Issue and further constrain the current limits of dark matter properties.

Prof. Man Ho Chan

*Guest Editor*





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