

Super-Chandrasekhar white dwarf

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Since 2012, along with my group members, I have been exploring super-Chandrasekhar white dwarfs by initiating this field. Motivated by observed peculiar over-luminous type Ia supernovae, suggesting possible super-Chandrasekhar mass-limit of white dwarfs, I have shown that there are a few possible avenues towards this, including effect of magnetic field. Along with my students, postdocs and collaborators, I have been exploring this by developing new theories and numerical simulations. The results have far reaching implications. I will summarize the current status of the field.