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Shedding light on the invisible - Radio signals from Dark Matter

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Abstract content
 (Max 300 words)

Dark matter is everywhere, but is elusive to any direct or indirect probe. We thus explore new astrophysical methods for indirect dark matter detection. Annihilation of dark matter particles produces emission signals that populate the whole electromagnetic spectrum, from radio to gamma-rays. In particular, we consider diffuse radio emission probes from dwarf spheroidal galaxies such as the Carina dwarf galaxy. Investigation of these emissions allows us to place strong limits on the mass of the dark matter particles and the velocity averaged annihilation rate and possibly arrive at a positive detection in the near future.

Apply to be
 considered for a student
 award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
 PhD)?

MSc

Main supervisor (name and email)
and his / her institution

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Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

No

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