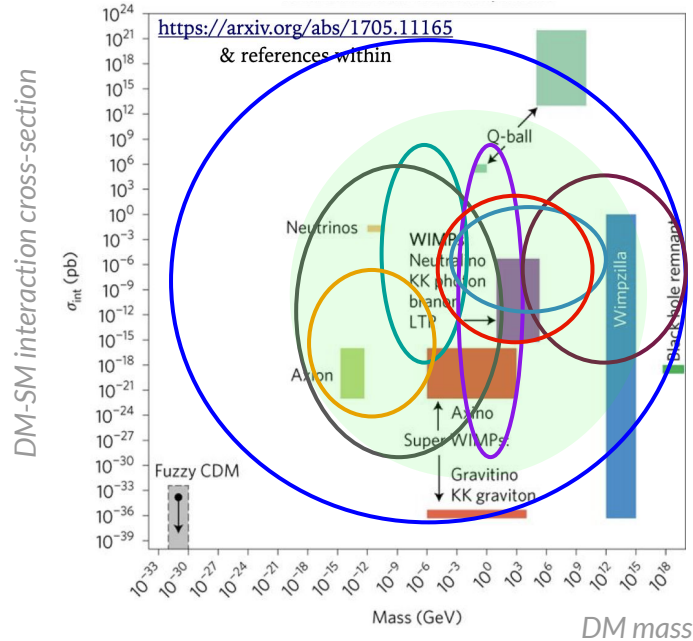


The Dark Matter landscape

Wide range of mass scales / interaction strengths for DM candidates

→ wide range of theories and experiments to discover DM



The best region to find dark matter is the one where more techniques and ideas can **discover** and **explore** DM!

Two activities with Swedish involvement in this talk promoting dark matter complementarity:

- iDMEu: an initiative for Dark Matter in Europe and Beyond
- Dark Matter complementarity within Snowmass 2021

(for a third activity on dark matter computing/analysis workflows within the [ESCAPE](#) project: see [this talk](#))

Not an inclusive list of **Swedish DM involvement**,
and sensitivity contours exclusively for illustration

Astrophysics and cosmology High energy collider experiments
Axion/ALP experiments Neutrino experiments
Indirect detection experiments Direct detection experiments
Accelerator (fixed target/beam dump) experiments
Gravitational wave experiments

dark matter is a growing activity in our community
→ **contact us and join in** on these activities!

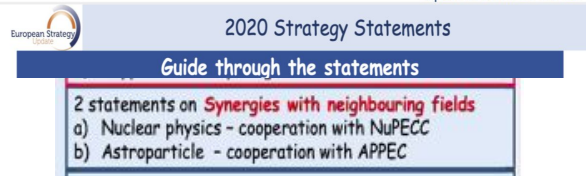
iDMEu

initiative for **Dark Matter** in **Europe and beyond**

<https://indico.cern.ch/e/iDMEu>

[K. Jon-And's talk, Partikeldagarna 2020](#)

Halina Abramowicz,
Open Council 20-06-19



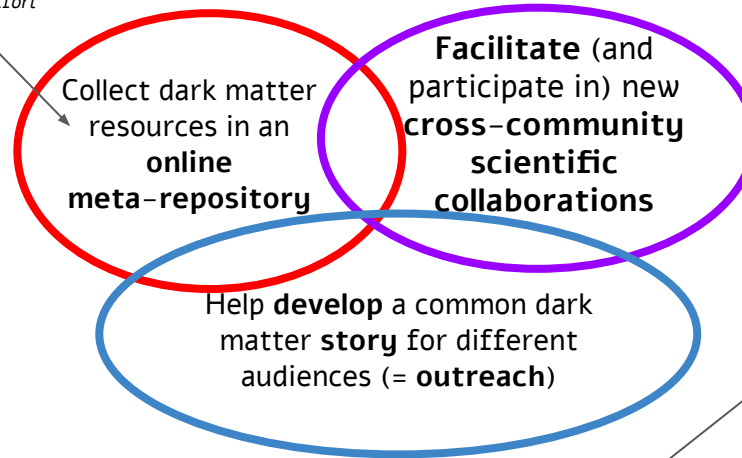
After the European Strategy Update process and during a joint ECFA/APPEC/NuPECC meeting, a number of DM researchers met with similar questions:

E.g. "what are your assumptions?" "why do you use this technique?" "how will findings in your DM research impact my DM research?" "where can we meet and discuss this topic in depth after this meeting?"

we realized that there was **no common platform** for these discussions or for resource sharing
→ we decided to start developing it!

Three connected iDMEu objectives:

Swedish undergraduate students will participate in this effort



iDMEu is **taking shape**

Meant as a **service** to the community with a **lightweight** organization

Helped by a **Task Force** put in place by APPEC/ECFA/NuPECC, and by reaching out to communities towards a **kick-off meeting in May 2021**

The JENAA iDMEu
LOI proponents:

Elena Cuoco
Marco Cirelli
Caterina Doglioni
Gaia Lanfranchi
Jocelyn Rebecca Monroe
Silvia Pascoli
Federica Petricca
Florian Reindl

Thanks to everyone who gave post-it input at the poster session of Partikeldagarna 2019!

iDMEu's success will be the success of the activities it facilitates!

