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Pierre Fest
Annecy, 25-26 Novembre 2021



L'école d'Athènes



L'école de Pierre



La "2ème" famille de Pierre

dark matter distribution/ detection

Direct detection

$$\frac{dR}{dE}(E, t) = \frac{\rho_0}{m_\chi m_A} \int v \cdot f(v) \frac{d\sigma}{dE}(E, v) d^3v,$$

Indirect detection

$$\frac{d\Phi_x}{dE_x} = \frac{1}{4\pi} \frac{\langle \sigma_{\chi\chi v} \rangle}{2m_\chi^2} \frac{dN_x}{dE_x} \times \int_{l.o.s.} \rho_{DM}^2(r) dr d\Omega$$

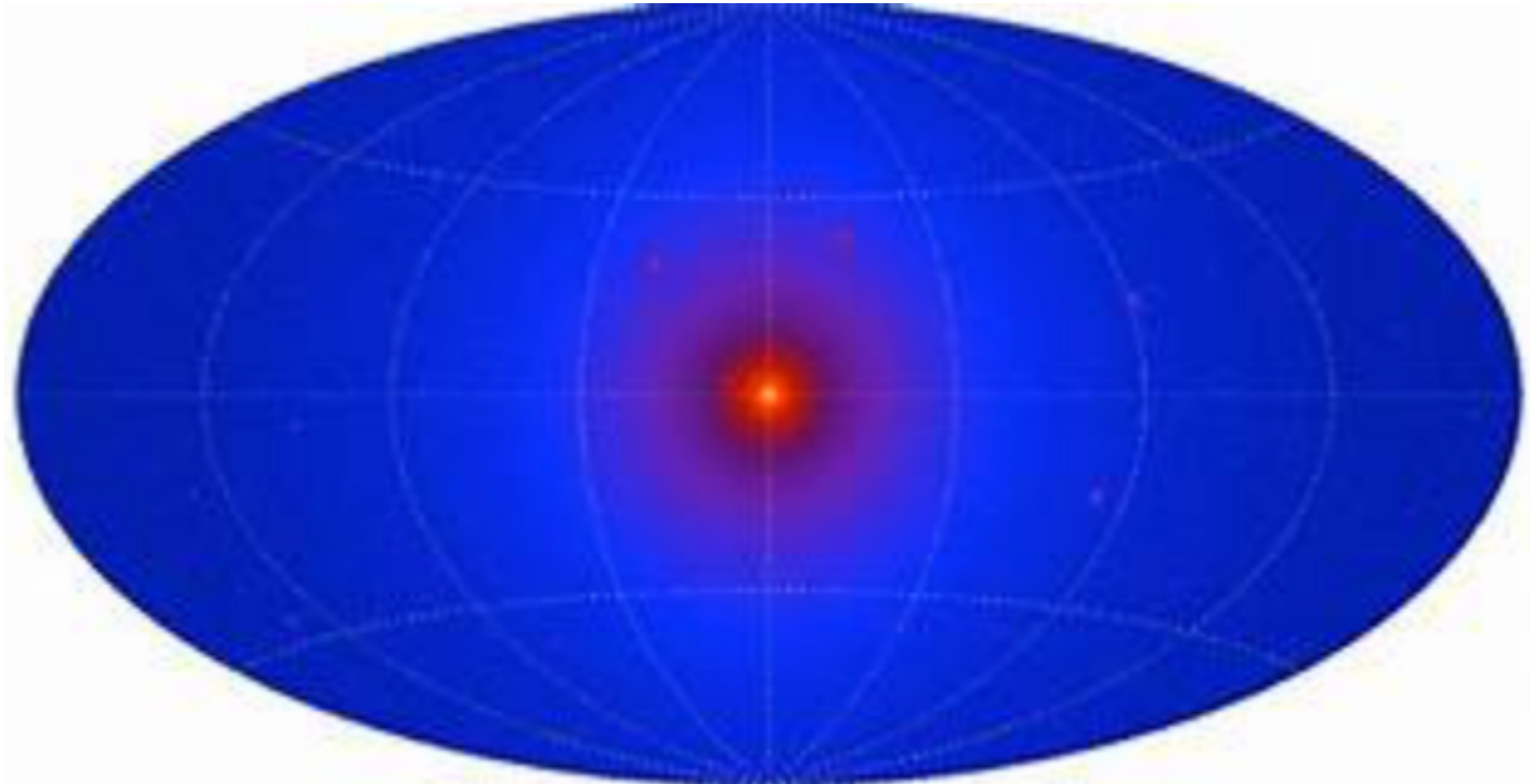
dark matter distribution/ detection

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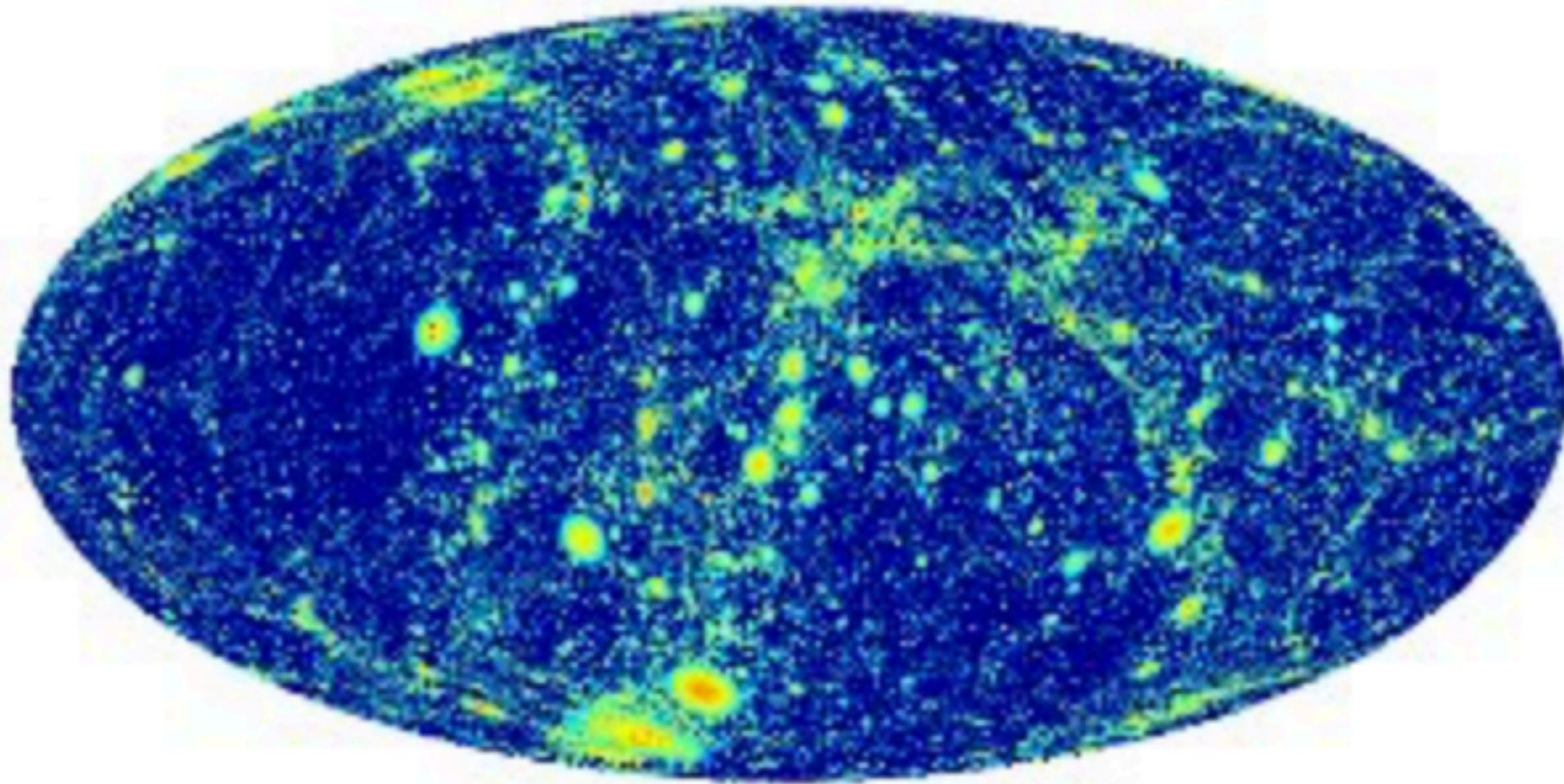
dark matter distribution/ detection

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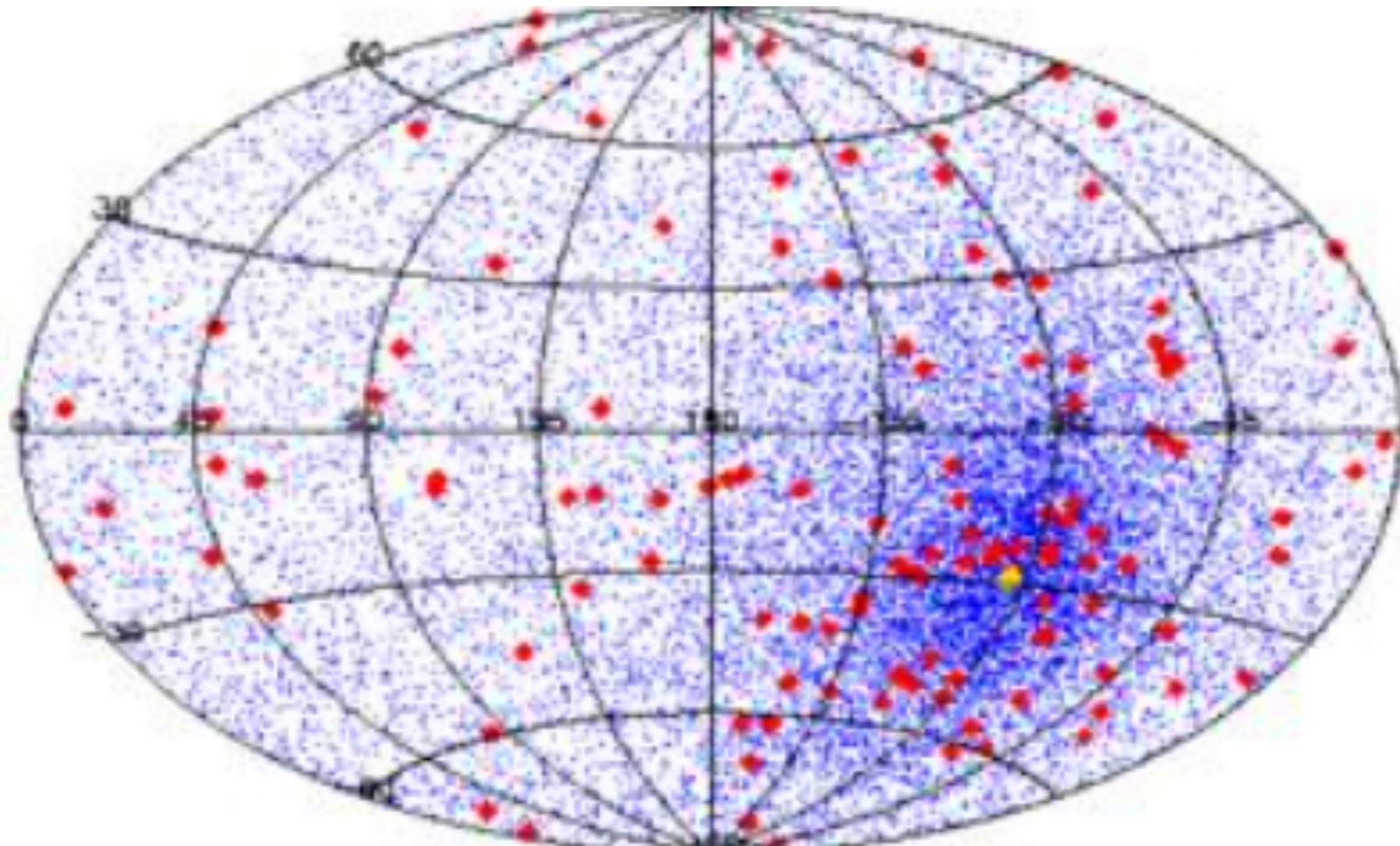
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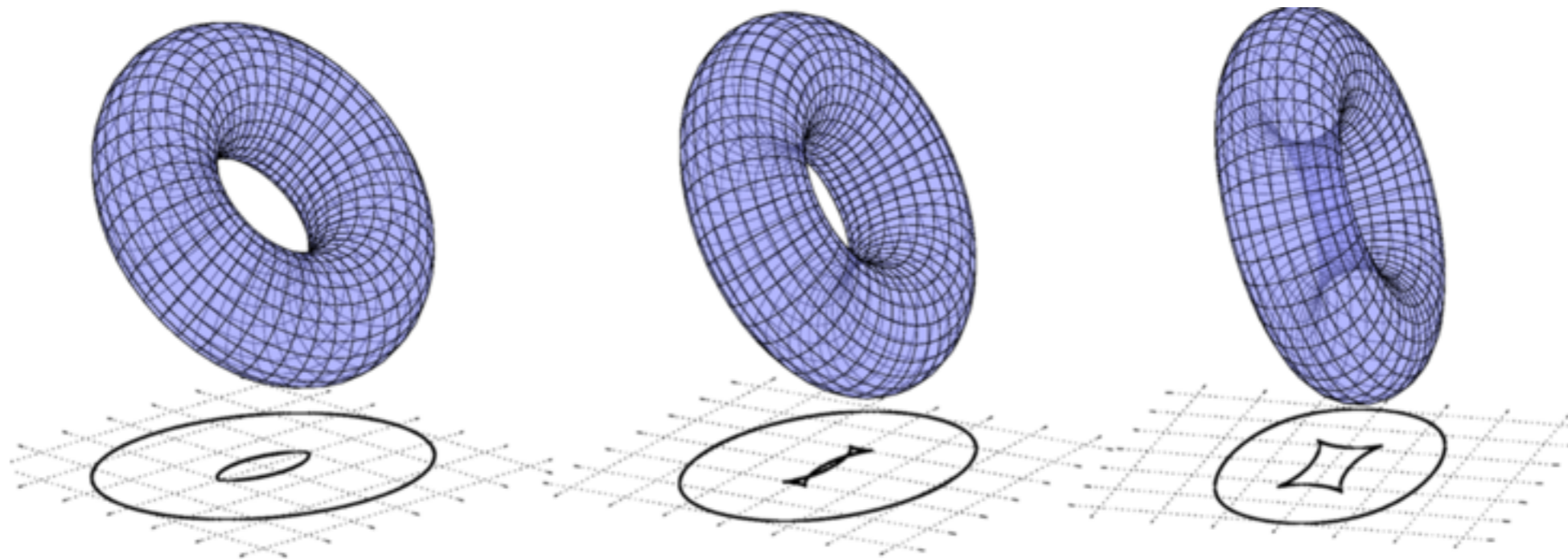
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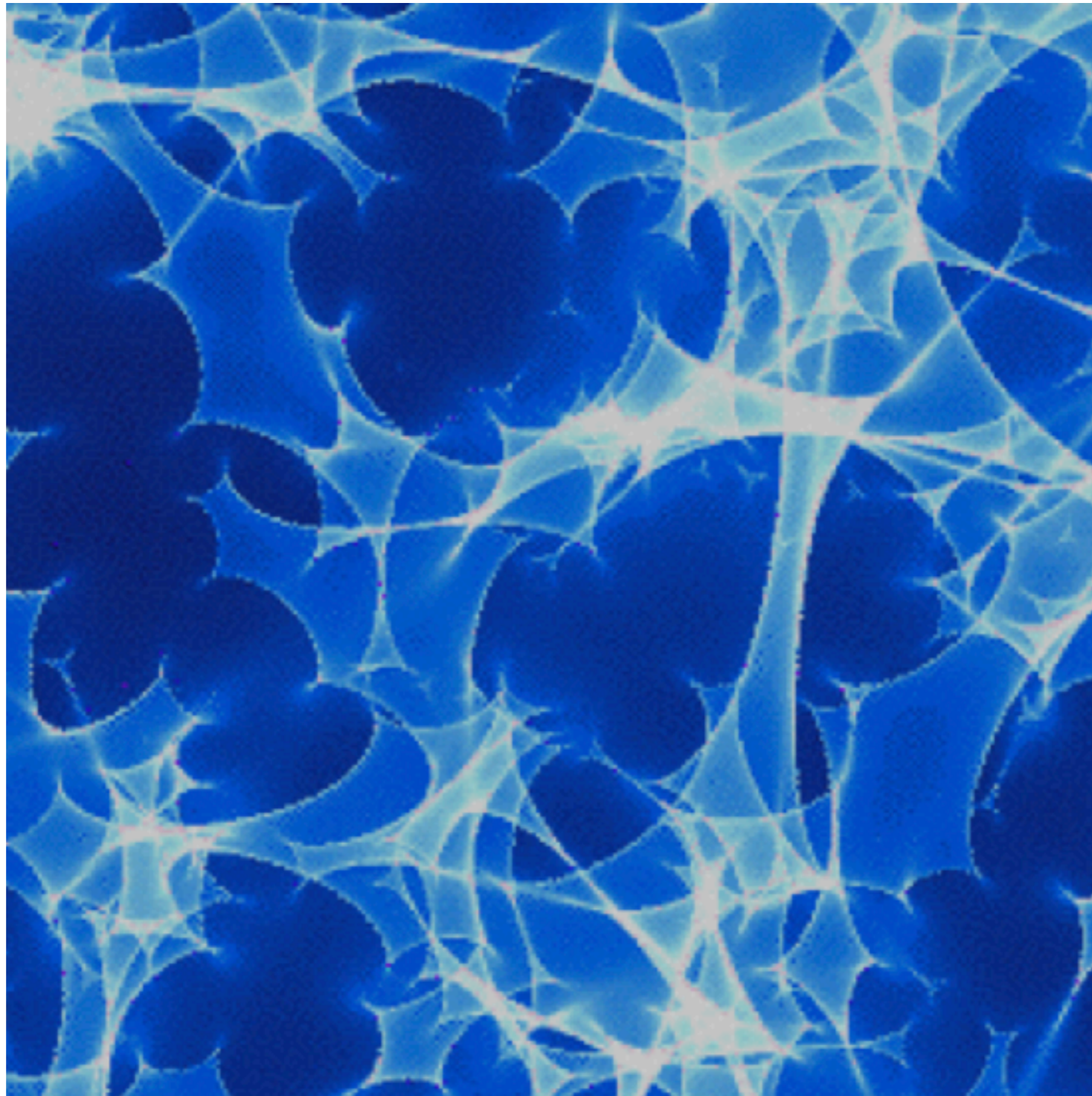
Singularities in dark matter distribution/ detection

René Thom théorie des catastrophes



Singularities in dark matter distribution/ detection

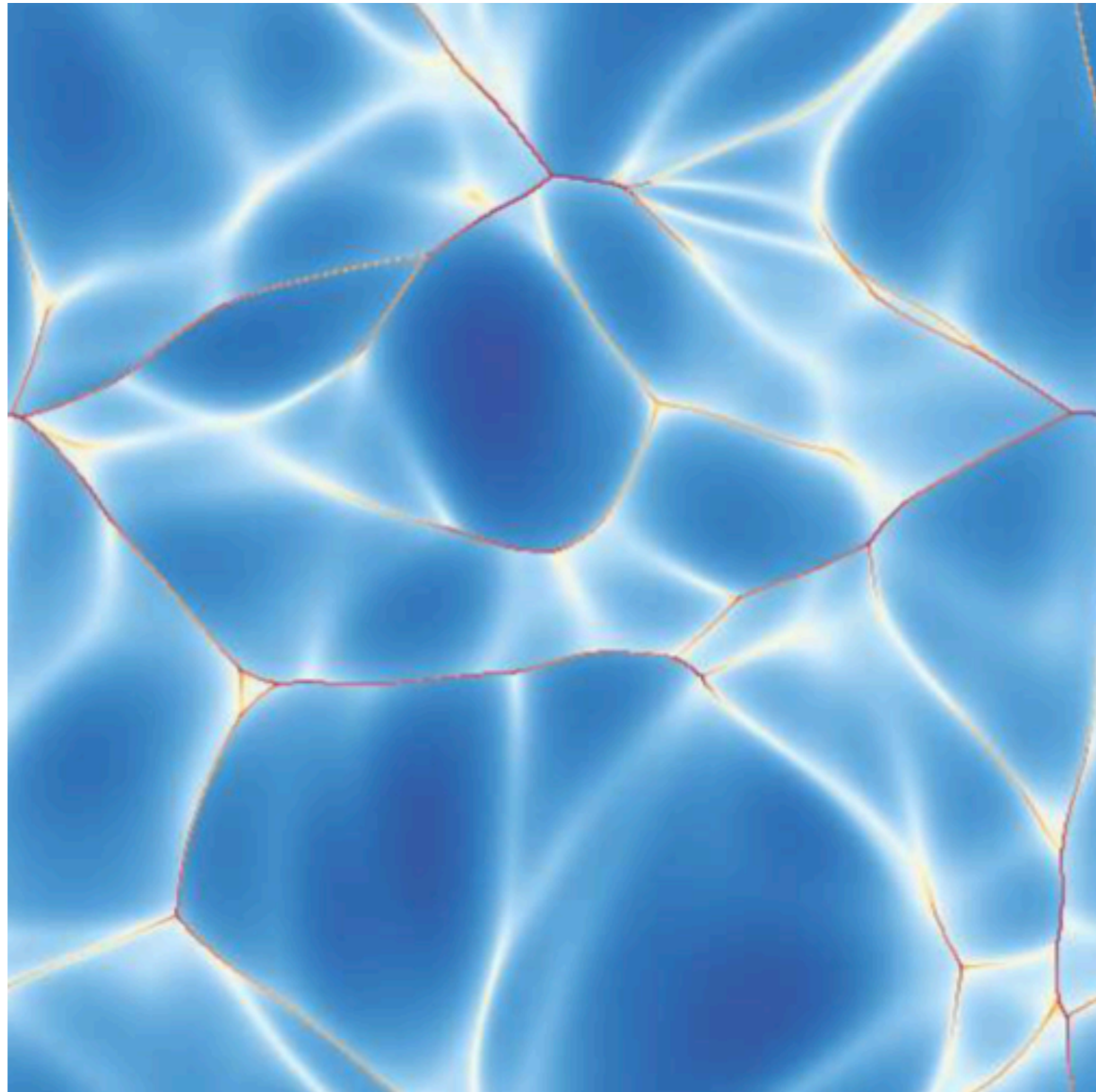
René Thom théorie des catastrophes



Caustics
(Light)

Singularities in dark matter distribution/ detection

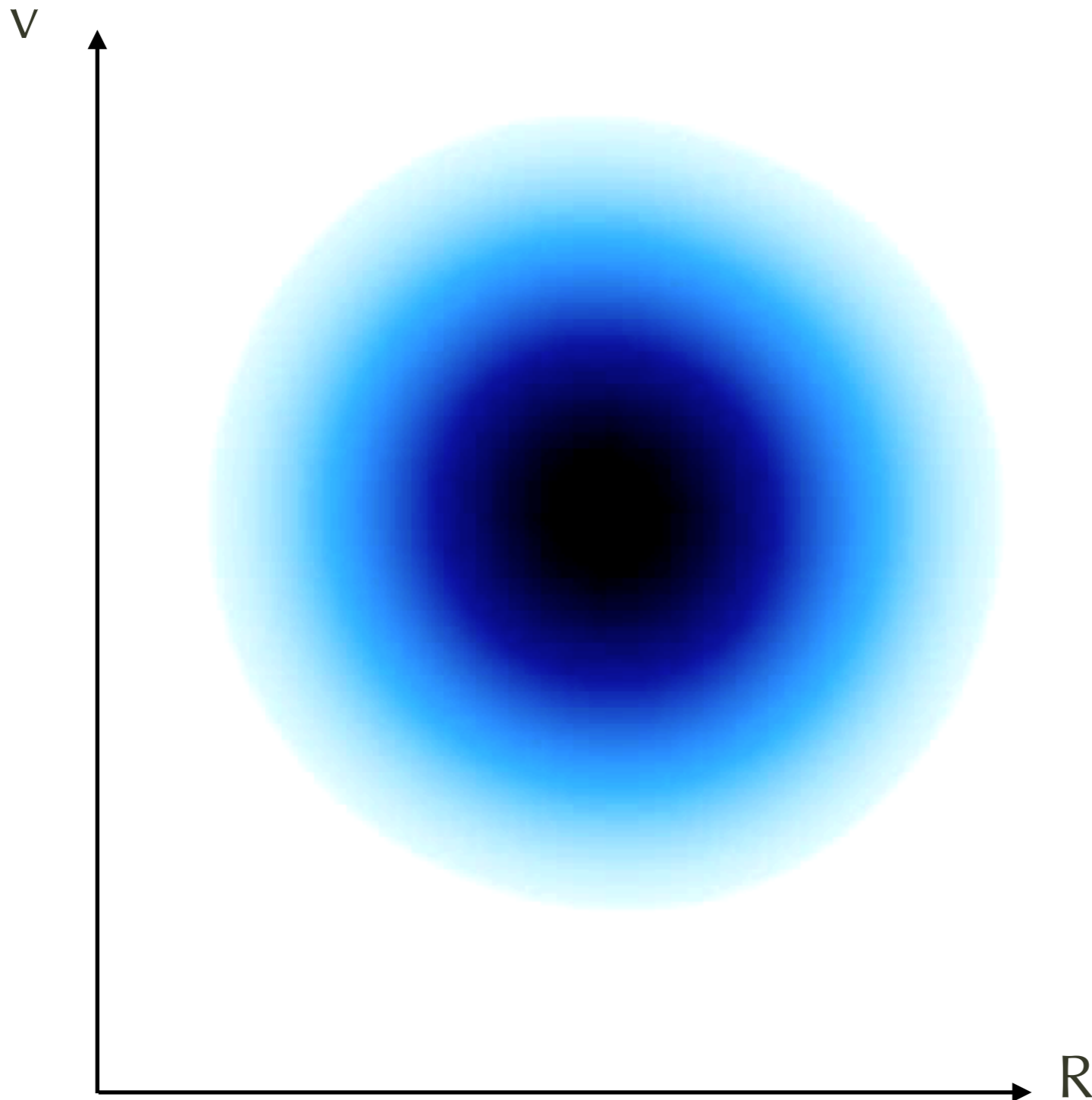
René Thom théorie des catastrophes



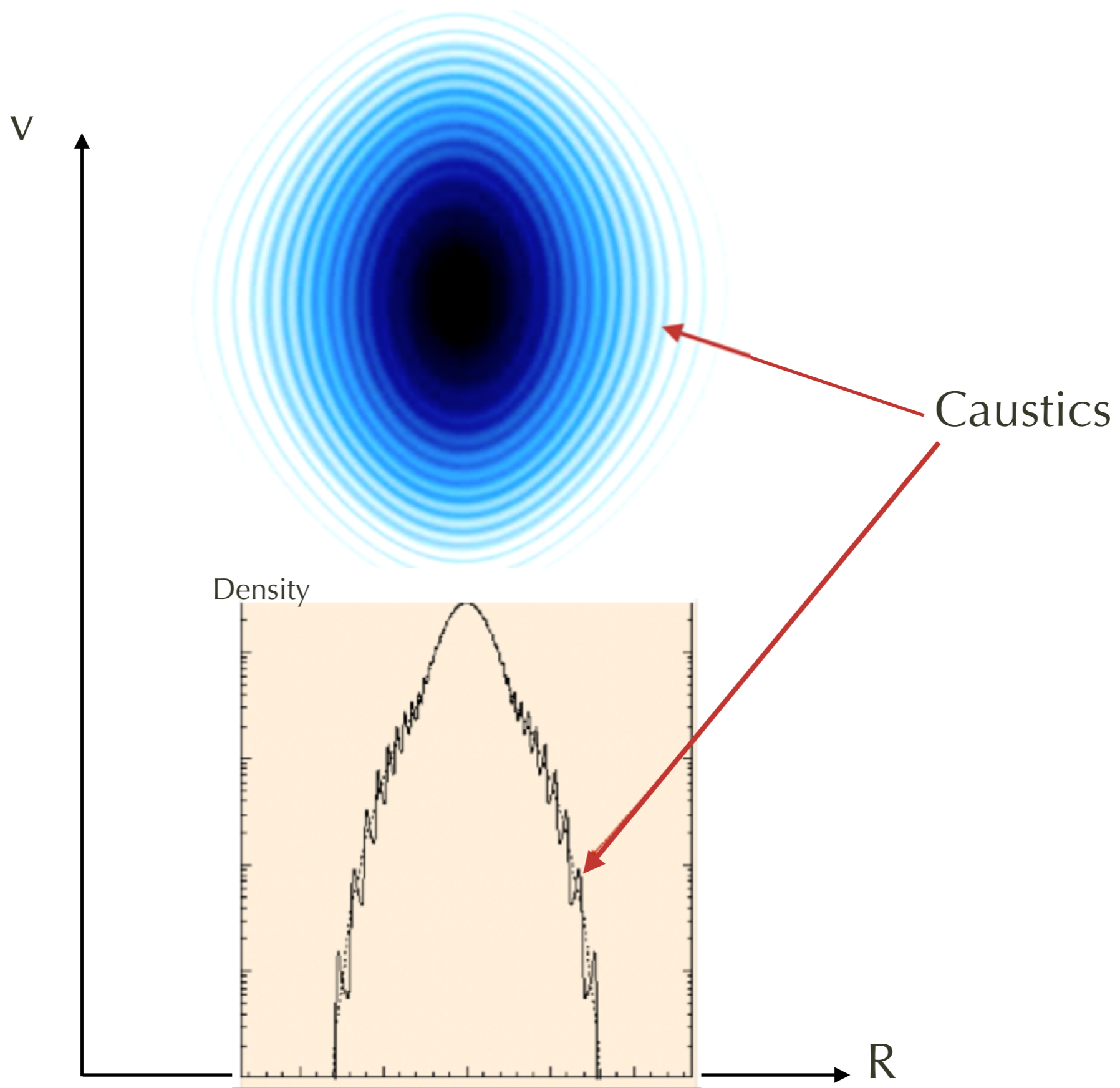
Caustics
(DM)

Singularities in dark matter distribution/ detection

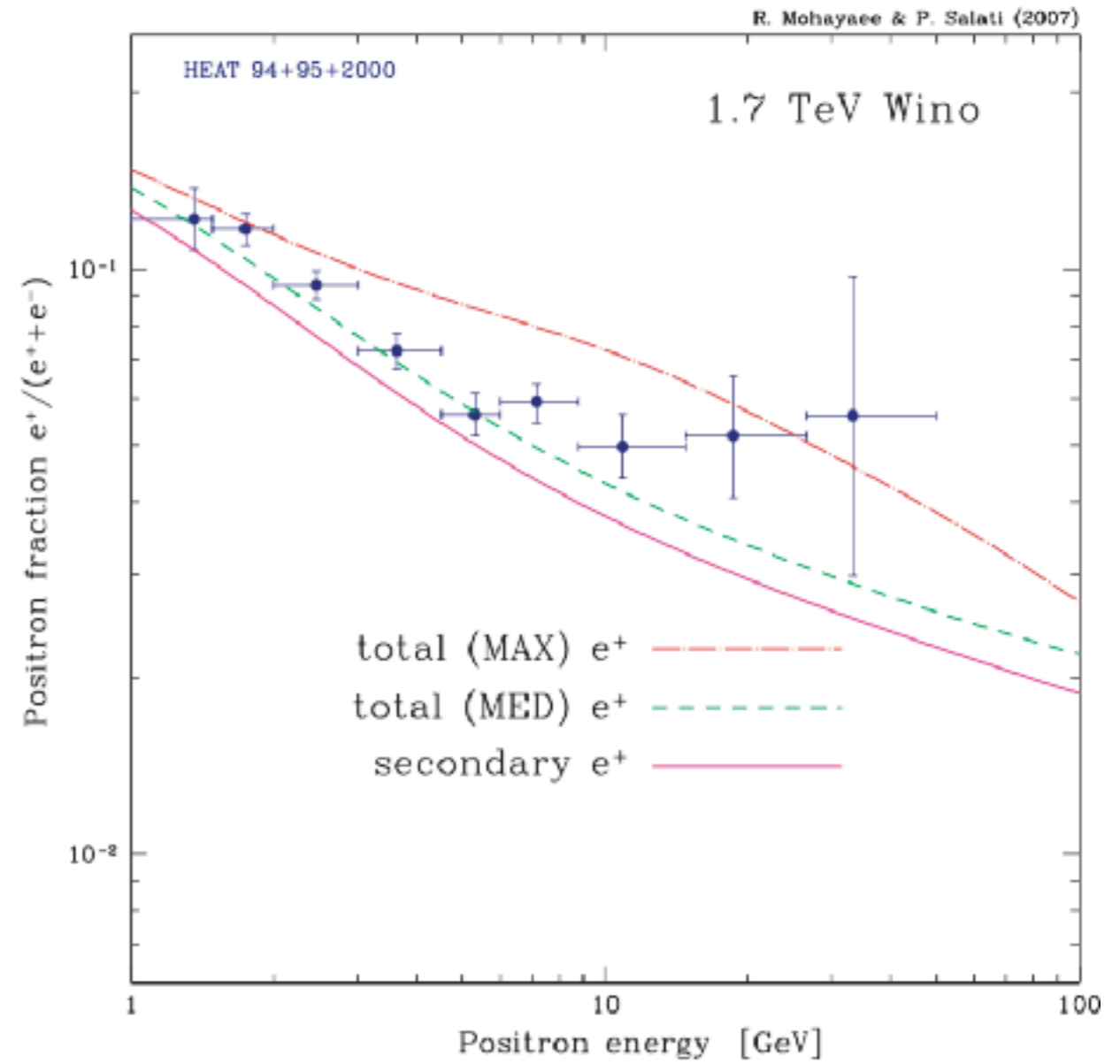
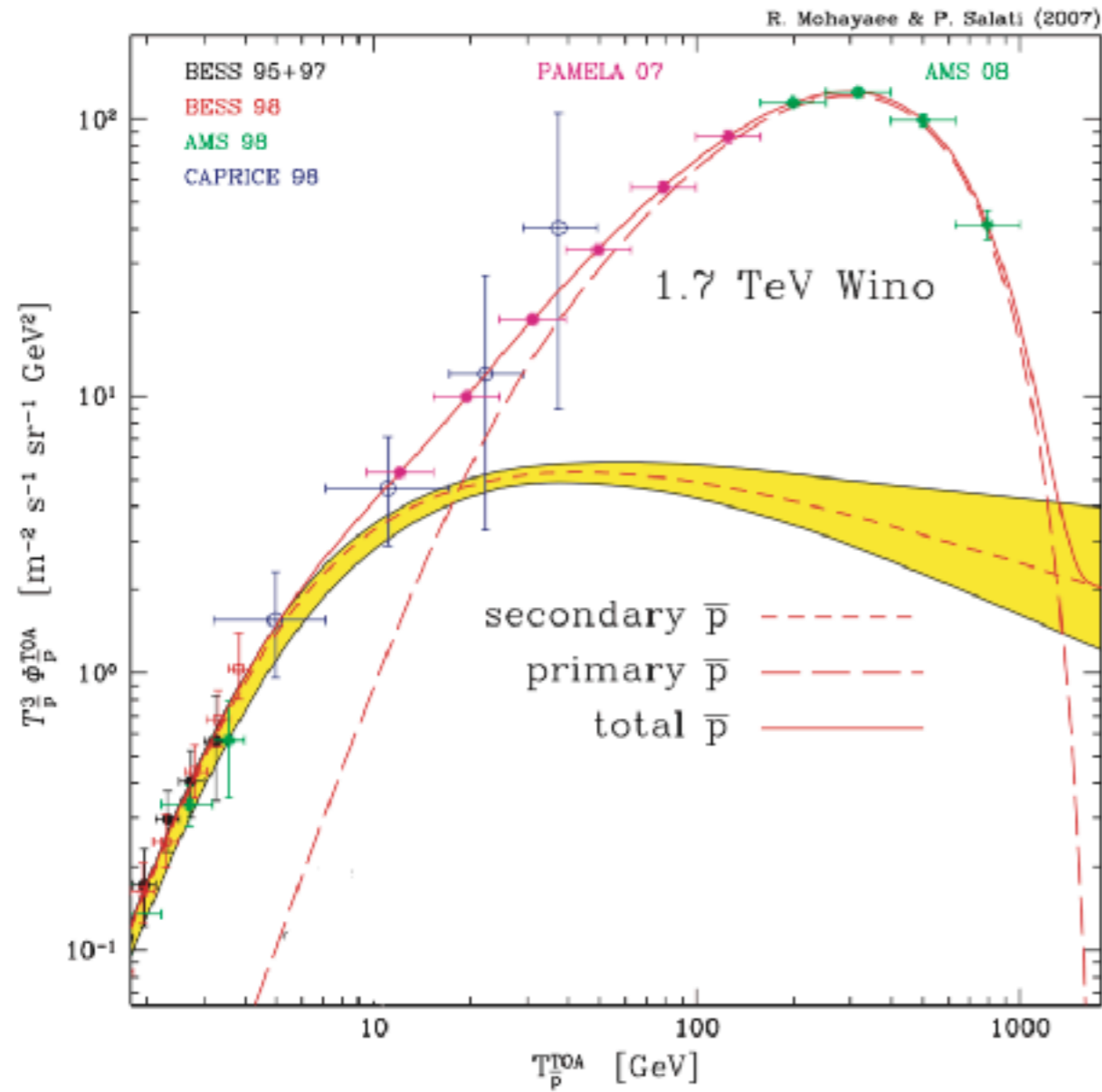
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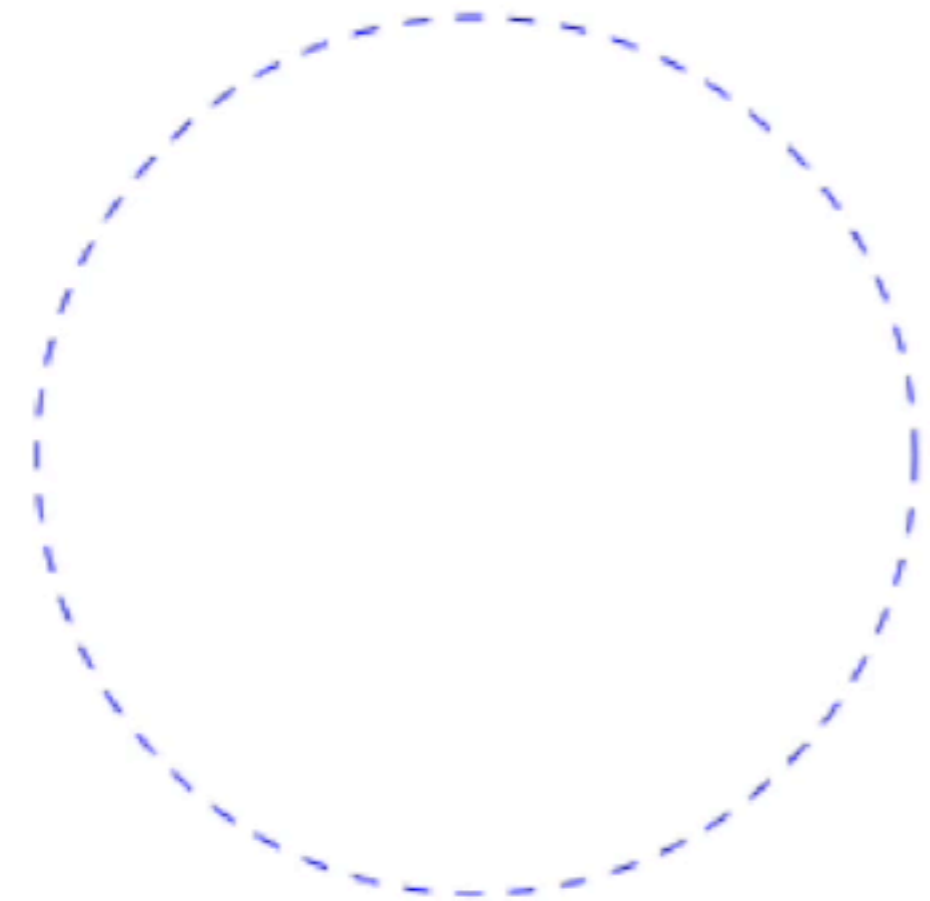


Singularities in dark matter haloes

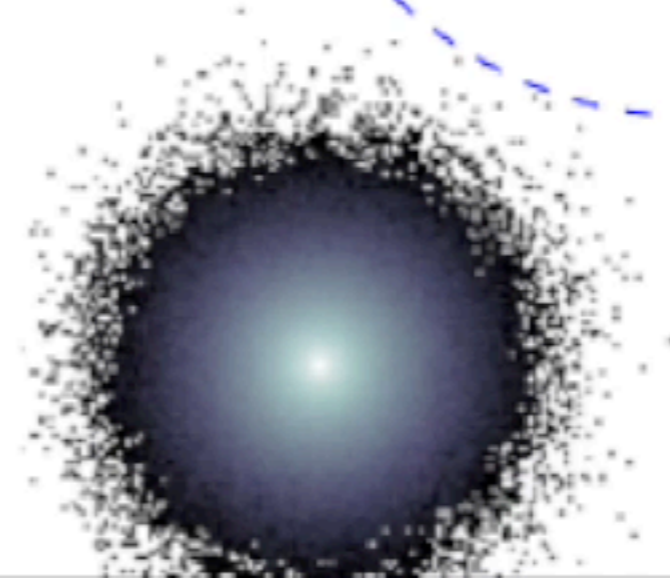
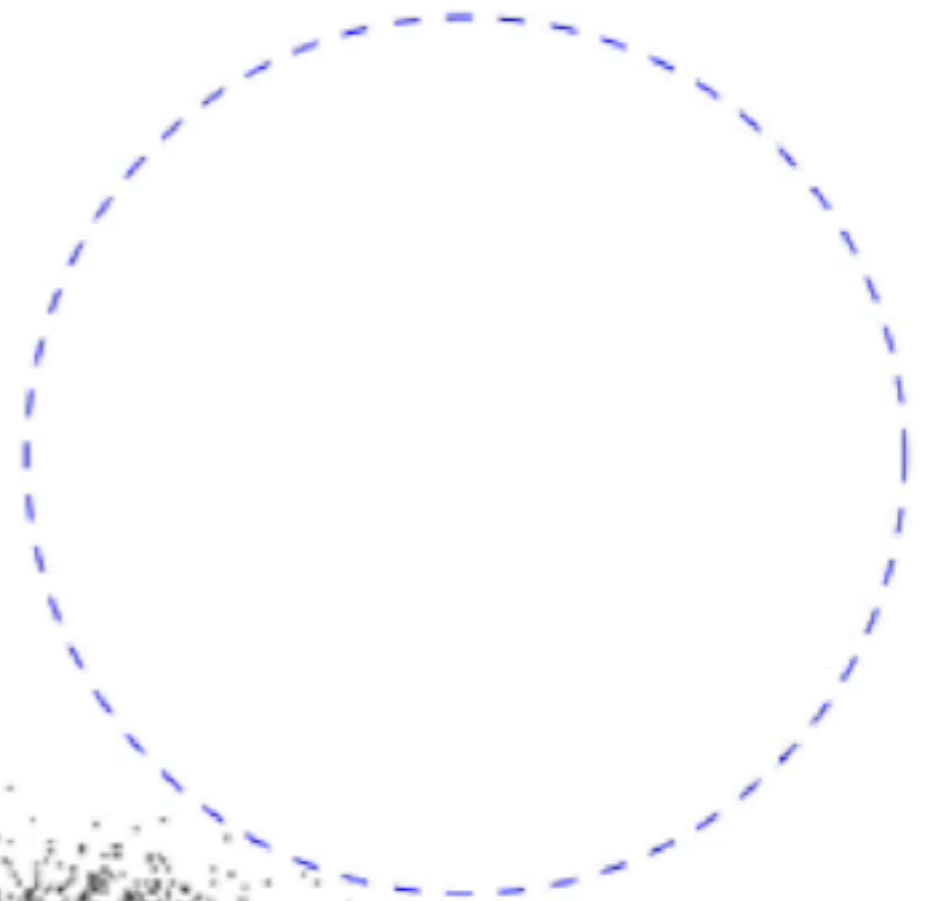


Cosmic-ray signature





STARS



Dark Matter



STARS

Patience !

Dark Matter

اسرار ازل را نه تو دانی و نه من

وین گل معانه تو خوانی و نه من

هست از پس پرده گفتگوی من و تو

چون پرده بر افتد نه تو مانی و نه من



Тайн вечности ни ты не знаешь, ни я.

Этих загадочных писем ни ты не
прочитаешь, ни я.

Существует только наша с тобой беседа
за завесой.

Когда [же] упадёт завеса – ни тебя не
останется, ни меня.



There was a Door to which I found no Key:

There was a Veil past which I could not see:

Some little Talk awhile of ME and THEE

There seemed – and then no more of THEE and ME.

