Hi, my name is Vu.

Anh Vu Phan

NIKHEF, Radboud University

Nikhef Radboud University

I'm from Vietnam

Pictures from the internet

I’m from Vietnam



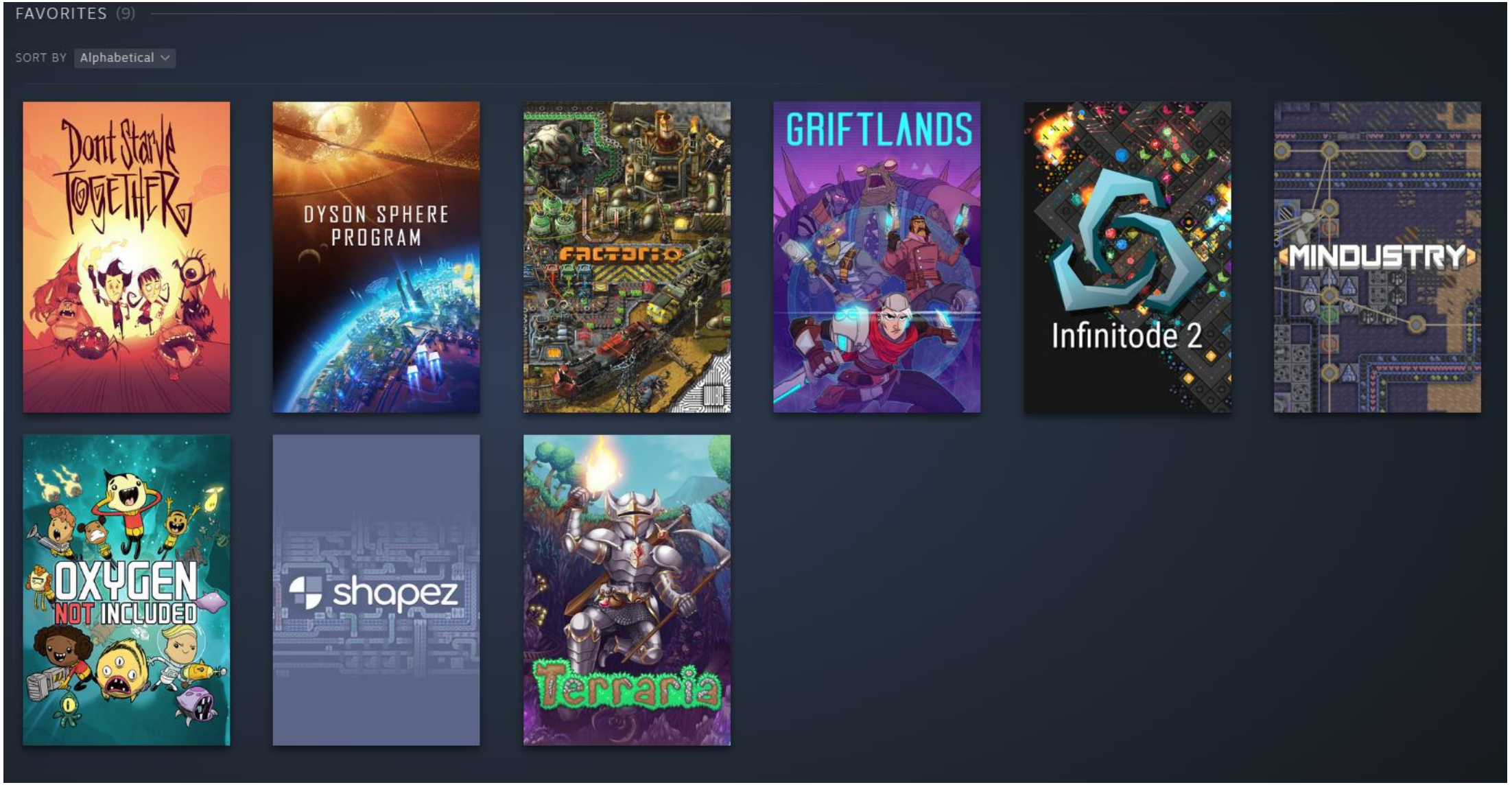



I work at NIKHEF and Radboud University, Netherlands

Nikhef

Radboud Universiteit

My hobbies are



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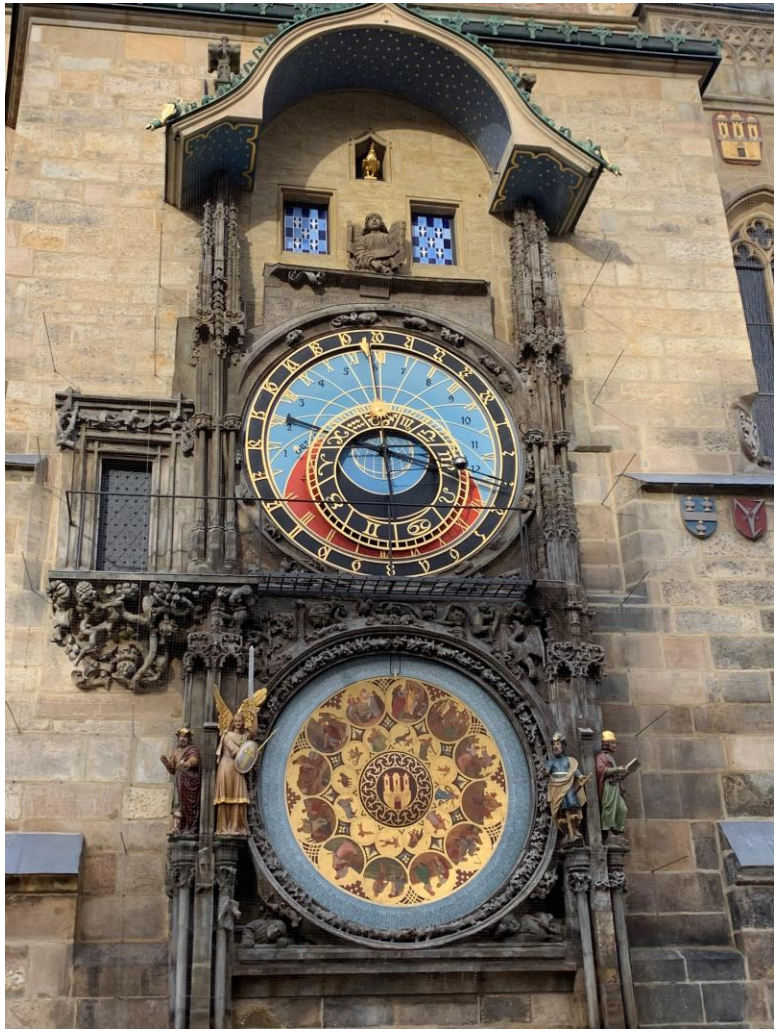
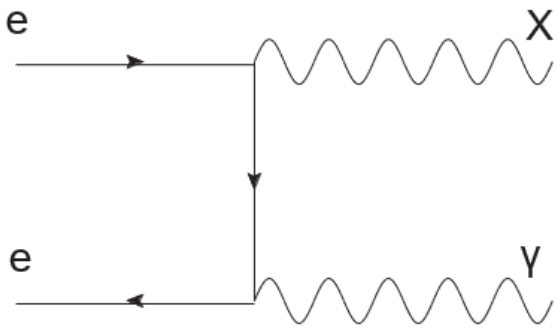
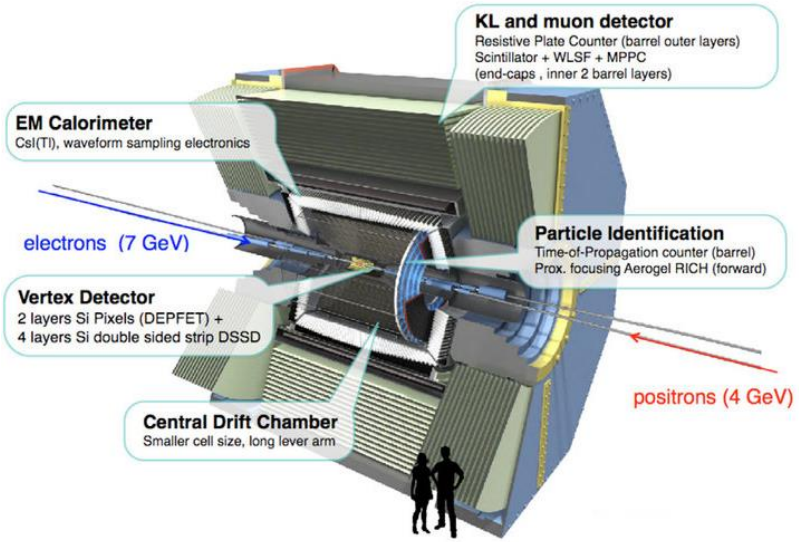
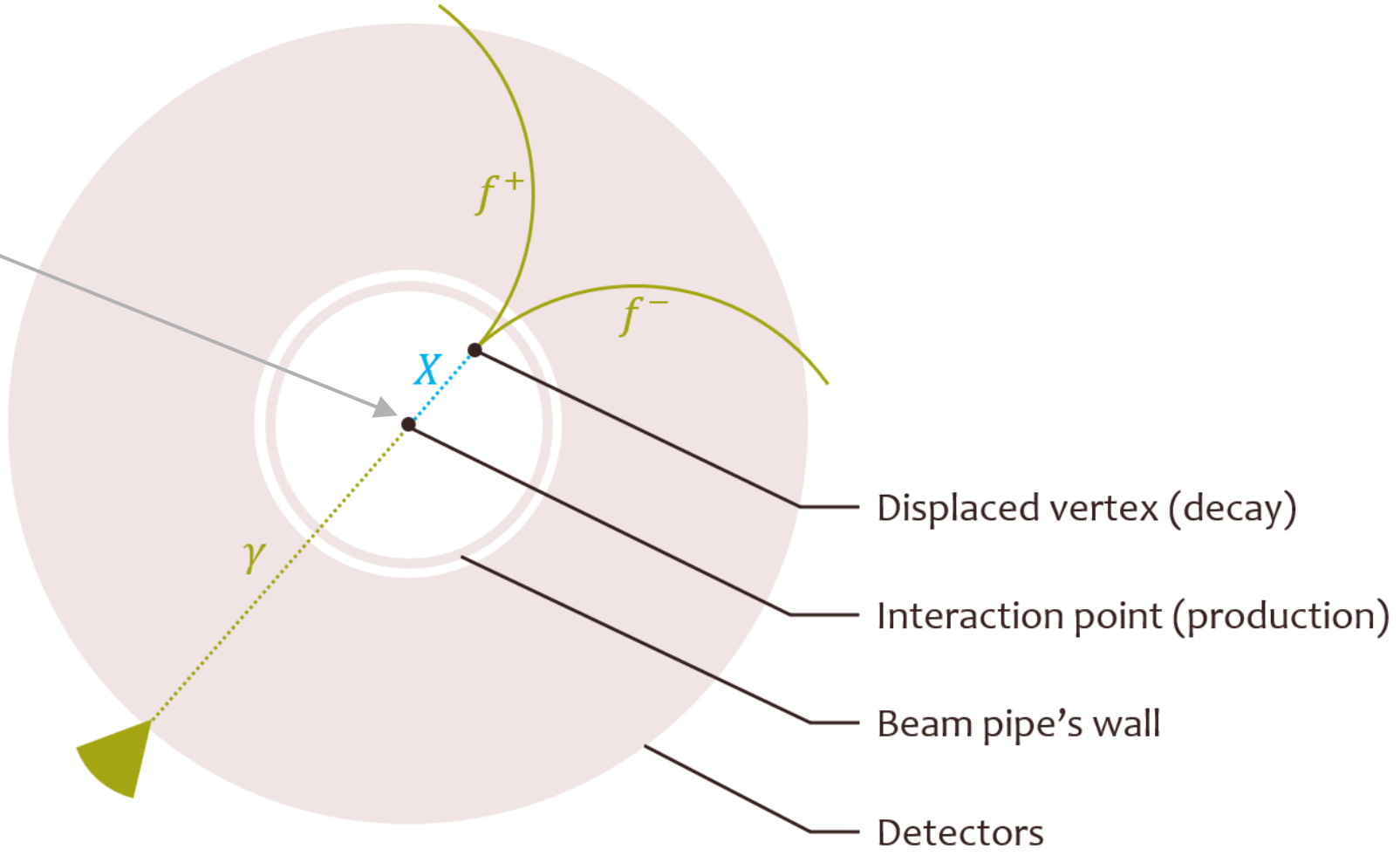


I work on dark photons and ALPs.







Work with Bart Steeman, Charles Timmermans, and Susanne Westhoff

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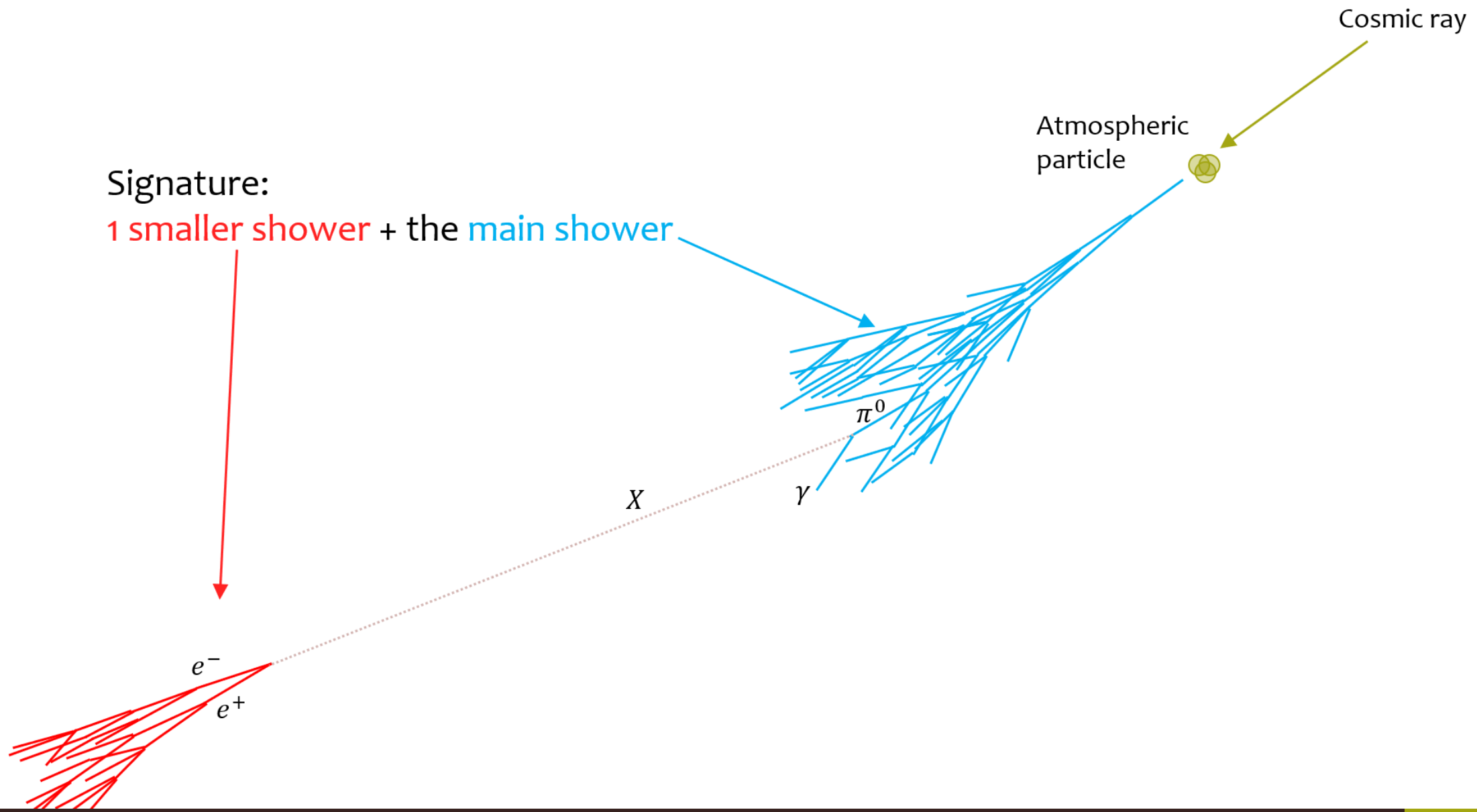

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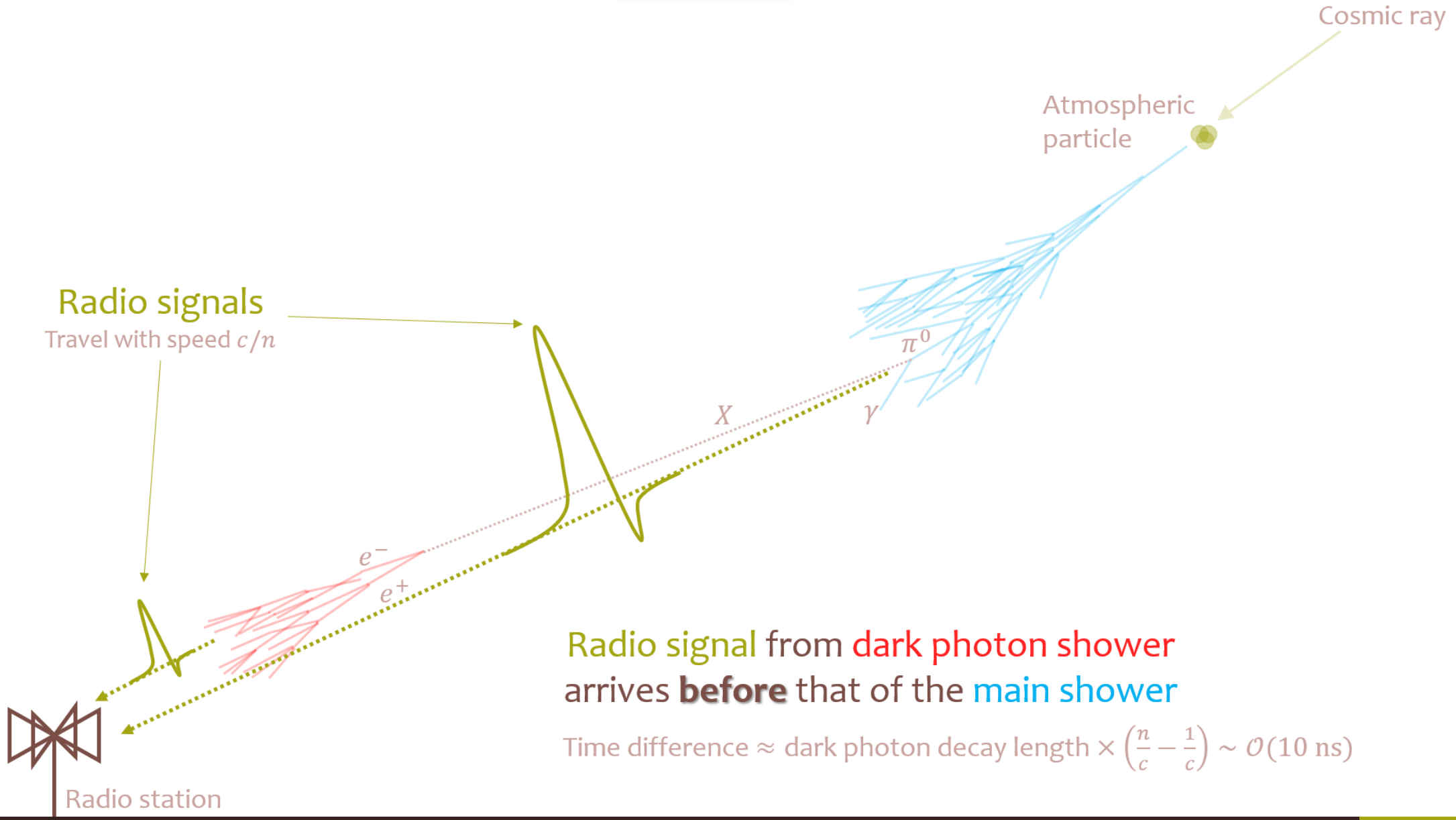

Radio signal from dark photon shower arrives **before** that of the main shower

Time difference ≈ dark photon decay length × $\left(\frac{n}{c} - \frac{1}{c}\right) \sim \mathcal{O}(10\ \text{ns})$

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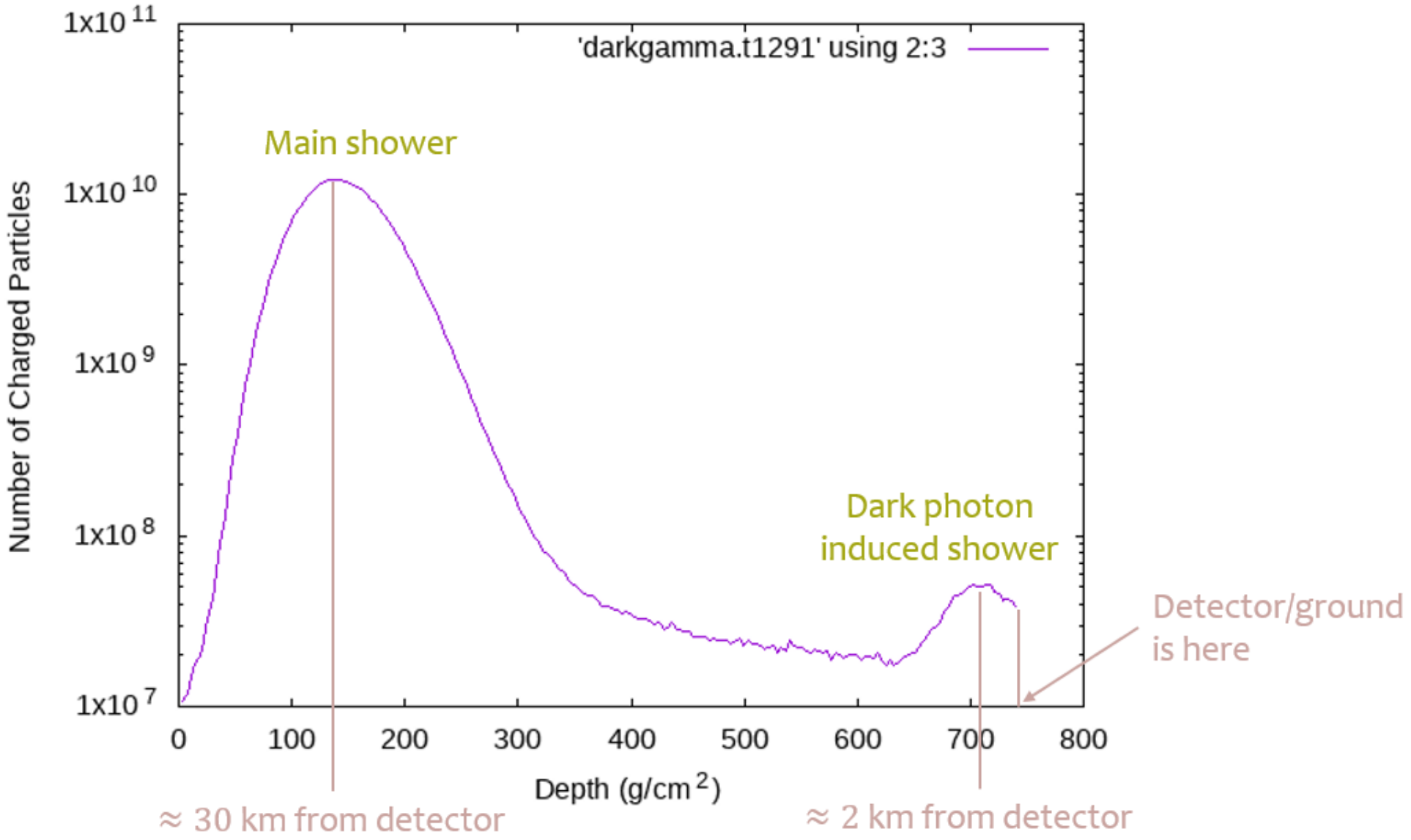

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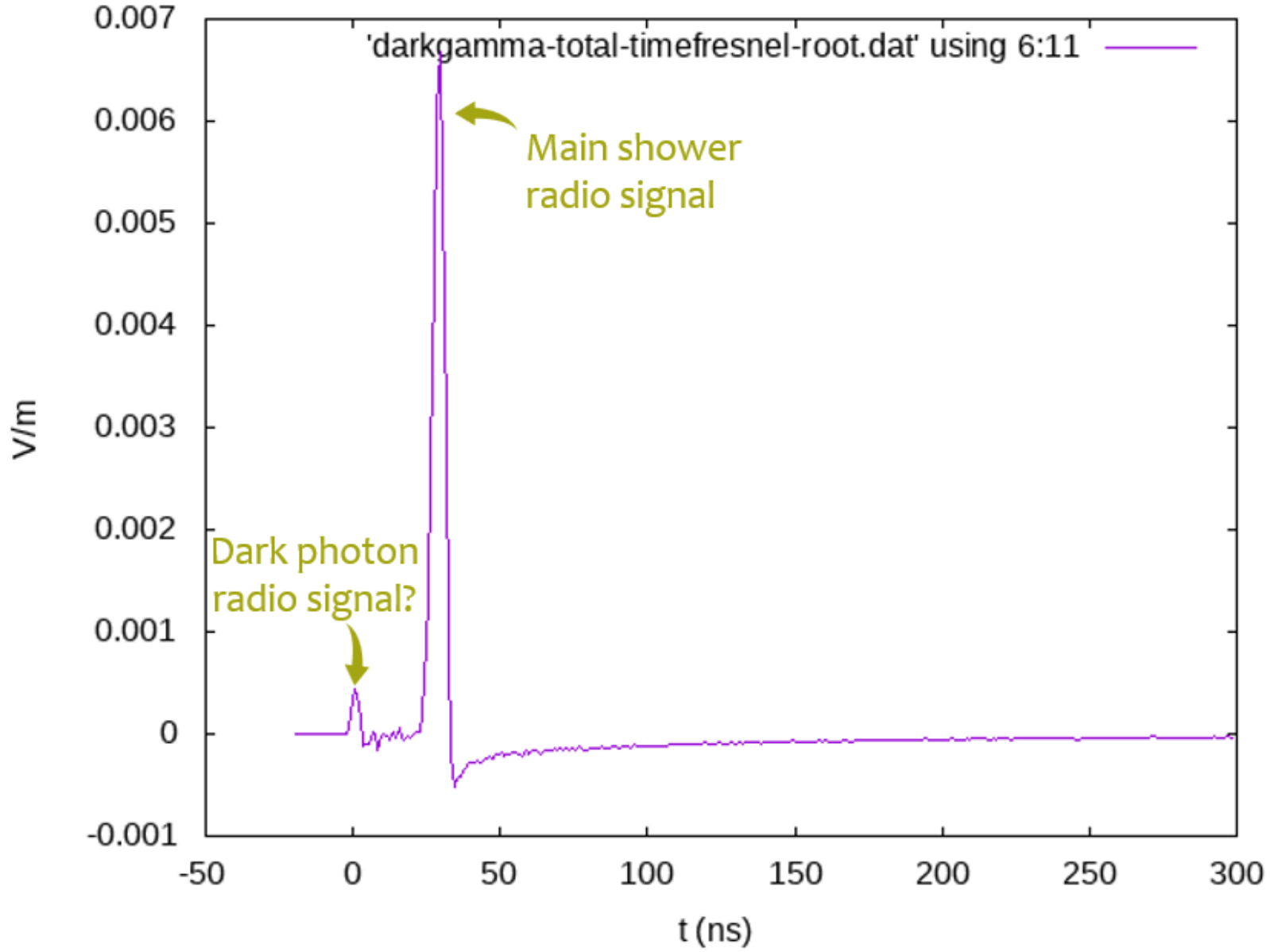

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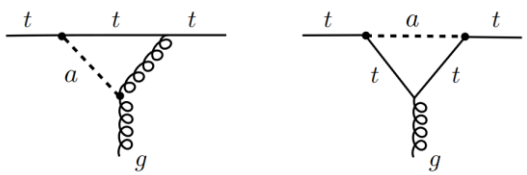
$$\mathcal{L}_{\text{eff}}^{D\leq 5} = \frac{1}{2}(\partial_\mu a)(\partial^\mu a) - \frac{m_{a,0}^2}{2}a^2 + \frac{\partial^\mu a}{f}\sum_F \bar{\psi}_F \boldsymbol{c}_F \gamma_\mu \psi_F$$
$$+ c_{GG}\frac{\alpha_s}{4\pi}\frac{a}{f}G^a_{\mu\nu}\tilde{G}^{\mu\nu,a} + c_{WW}\frac{\alpha_2}{4\pi}\frac{a}{f}W^A_{\mu\nu}\tilde{W}^{\mu\nu,A} + c_{BB}\frac{\alpha_1}{4\pi}\frac{a}{f}B_{\mu\nu}\tilde{B}^{\mu\nu}.$$



Bauer, et al. (2021)

Top chromomagnetic dipole moment

$$\mathcal{L} \supset -\hat{\mu}_t \frac{g_s}{2m_t}\bar{t}\sigma^{\mu\nu}T^a t\, G^a_{\mu\nu}.$$

Not the whole picture!

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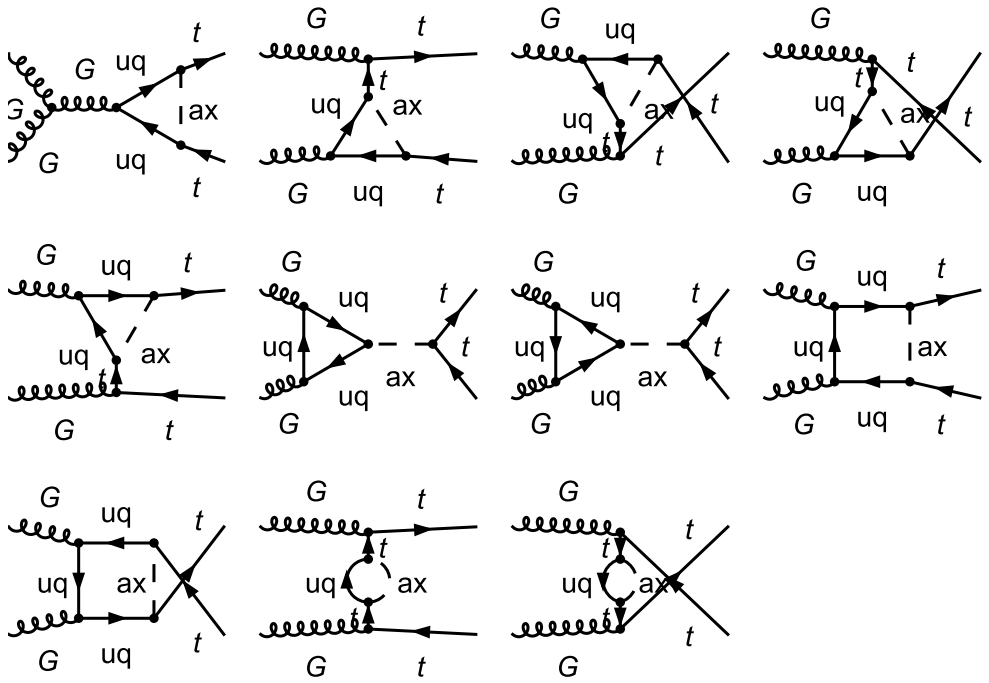

+ running of SMEFT operators

Thanks!

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