Sofie Nordahl Erner

From: Denmark (not Germany!)

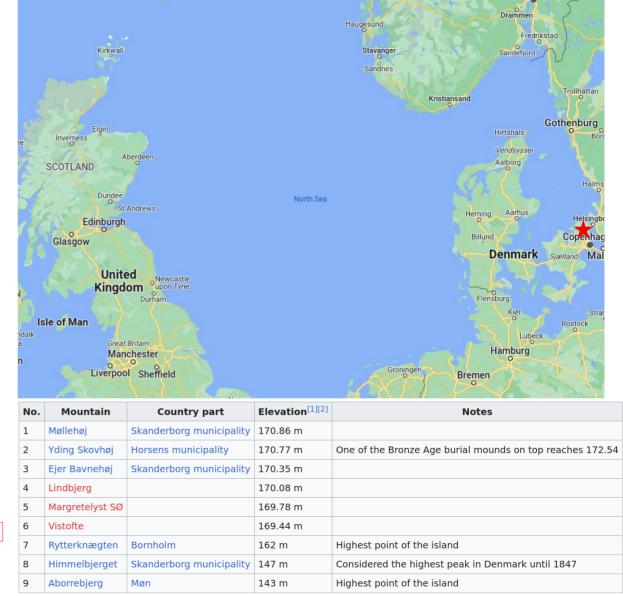


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Lowest highest point in Europe

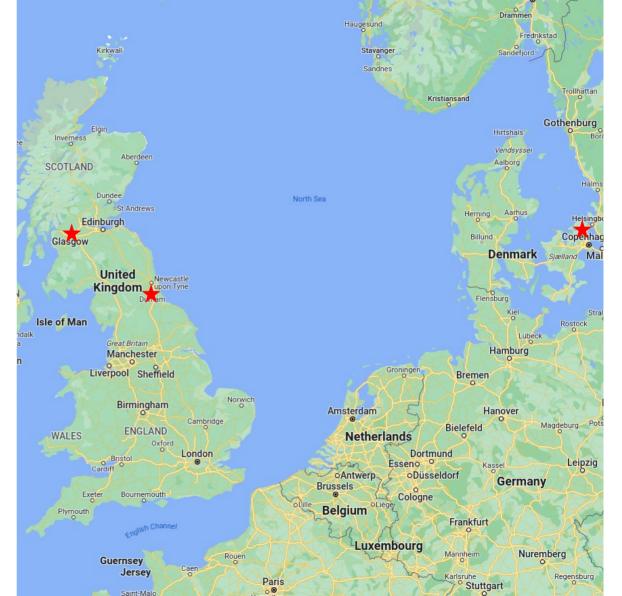
32	Steel Chited Kingdom	Ben Nevis ^[8]	1,345 m (4,413 ft)
33	🛨 Finland	Halti	1,324 m (4,344 ft)
34	Ireland (Republic of)	Carrauntoohil	1,041 m (3,415 ft)
35	c. Turkey	Mahya Dağı ^[9]	1,031 m (3,383 ft)
36	Hungary	Kékes	1,014 m (3,327 ft)
37	Netherlands (Saba)	Mount Scenery ^[10]	887 m (2,910 ft)
38	📥 San Marino	Monte Titano	749 m (2,457 ft)
39	Belgium	Signal de Botrange	694 m (2,277 ft)
40	Luxembourg	Kneiff	560 m (1,837 ft)
41	Moldova	Bălănești Hill	430 m (1,411 ft)
42	Belarus	Dzyarzhynskaya Hara	345 m (1,132 ft)
43	Netherlands	Vaalserberg ^[10]	321 m (1,053 ft)
44	Estonia	Suur Munamägi	318 m (1,043 ft)
45	Eatvia	Gaiziņkalns	312 m (1,024 ft)
46	📕 Lithuania	Aukštojas Hill	294 m (965 ft)
47	Malta	Ta' Dmejrek	253 m (830 ft)
48	Denmark	Møllehøj ^[6]	171 m (561 ft)
49	Monaco	Chemin des Révoires	163 m (535 ft)
50	😽 Vatican City	Vatican Hill	75 m (246 ft)



Sofie Nordahl Erner From: Denmark Undergrad: University of Glasgow PhD: Institute of Particle Physics Phenomenology (IPPP), Durham

PhD Beyond-Standard Model physics at Colldiers

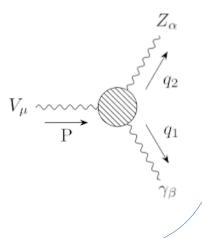
Supervisor: Martin Bauer



PhD

Beyond-Standard Model physics at Colldiers

- Neutral Triple Gauge Boson Couplings (NTGCs)
 - Find a new operator
 - Not energy, momentum, ø, etc.
 - Combination of the momenta
 - Improve exclusions limits for FCC-ee

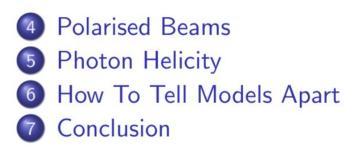


Goal

Measure the Spin of Dark Matter in $e^+e^- \rightarrow \gamma + X$ Processes

1 Process

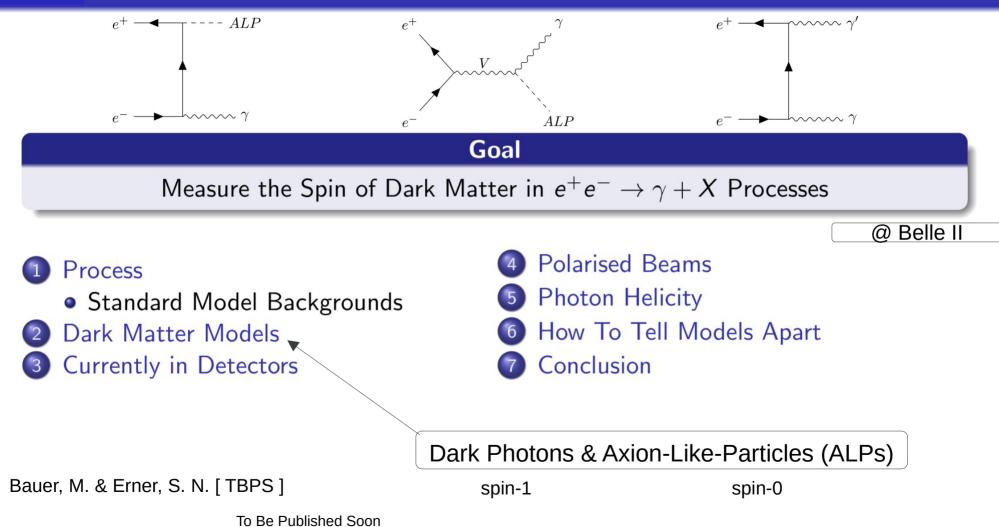
- Standard Model Backgrounds
- 2 Dark Matter Models
- 3 Currently in Detectors



Bauer, M. & Erner, S. N. [TBPS]

@ Belle II

Outline



PLANCK 2023

Sofie Nordahl Erner

PhD

Beyond-Standard Model physics at Colldiers

- Exclusion Limits for Neutral Triple Gauge Boson Couplings (NTGCs) at FCC-ee
- How to Measure the Spin of DM
- Combine the two above;
 - Use polarisation to distinguish NTGC
- AN Underground Belayed In-Shaft search experiment (ANUBIS) @ ATLAS
 - Searches for long-lived particles
 - Theory & Tech Support



Interests

• Fun Fact: Used to be a competitive fencer

- EDI group (Equity Diversity & Inclusivity)
 - Making physics more accessible and welcoming
 - We're the future, let's demand better

Go join your local EDI group or make one!