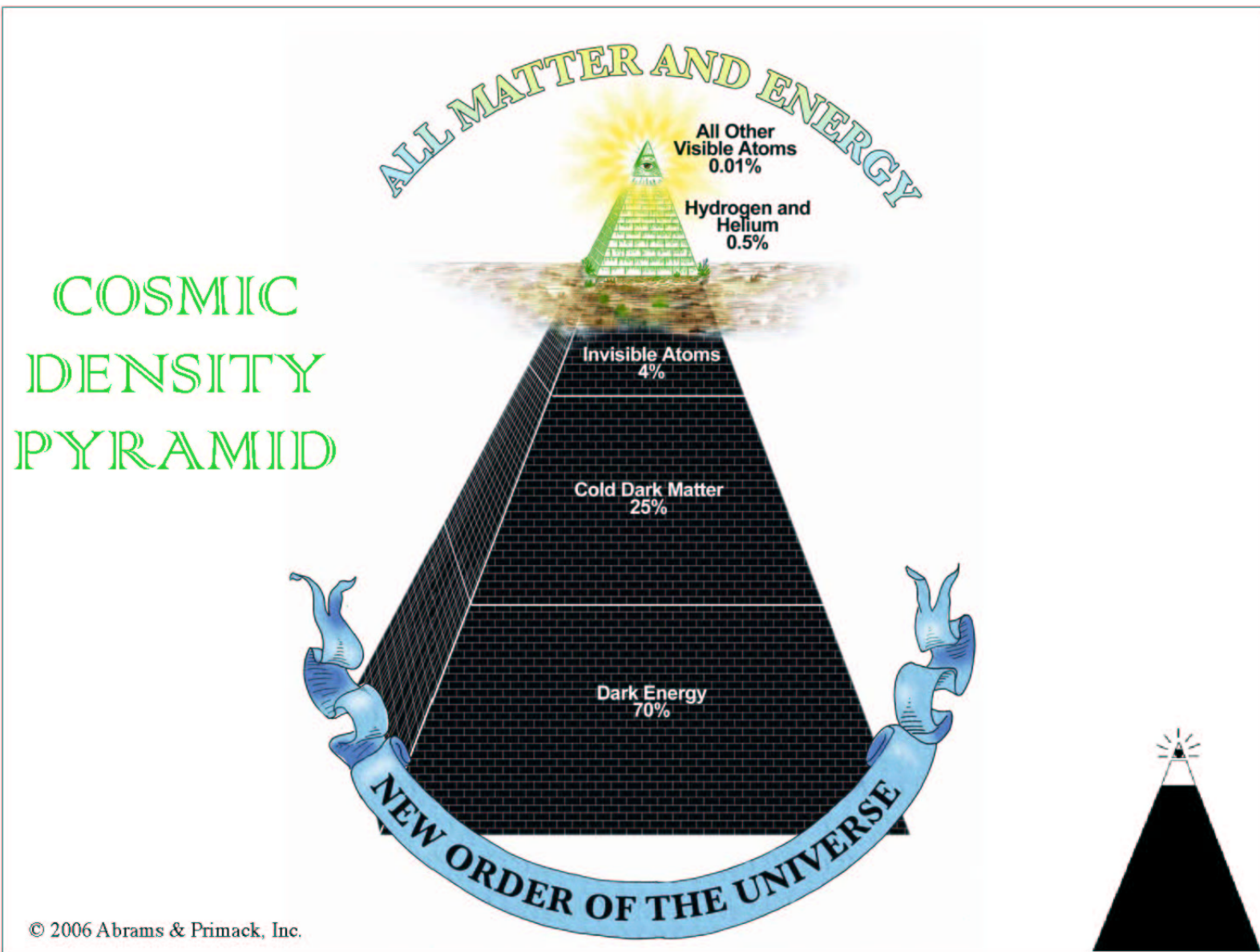


Research in the Snowden-Ifft Lab

Daniel Snowden-Ifft
The 20th Physics Phestival
November 11, 2021

The Dark Matter Mystery



DRIFT-IIb in Boulby



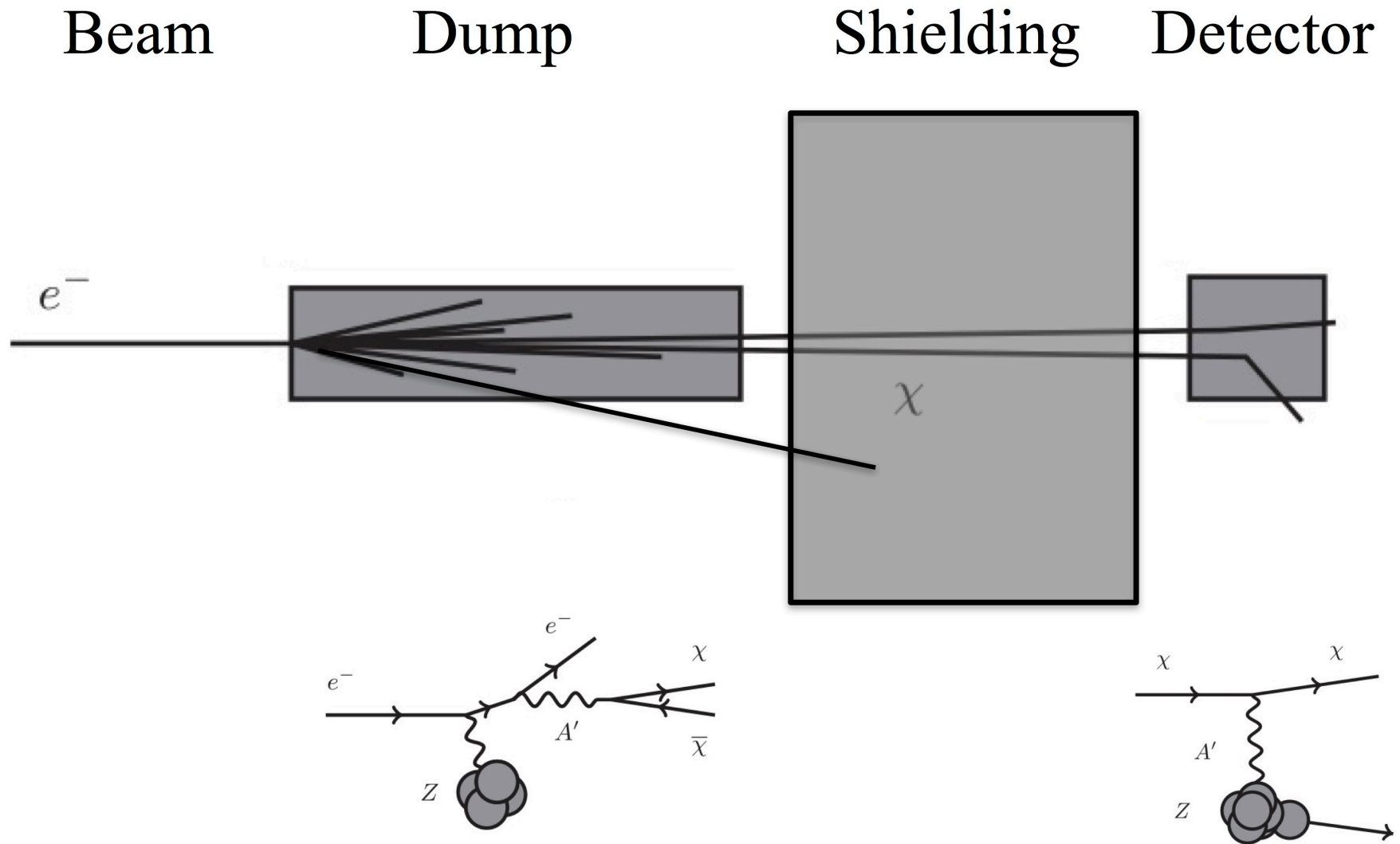
The Wisdom of Dr. Seuss

"All I need is a reindeer..." The Grinch looked around. But, since reindeer are scarce, there was none to be found. Did that stop the old Grinch? No! The Grinch simply said, "If I can't find a reindeer, I'll make one instead!"

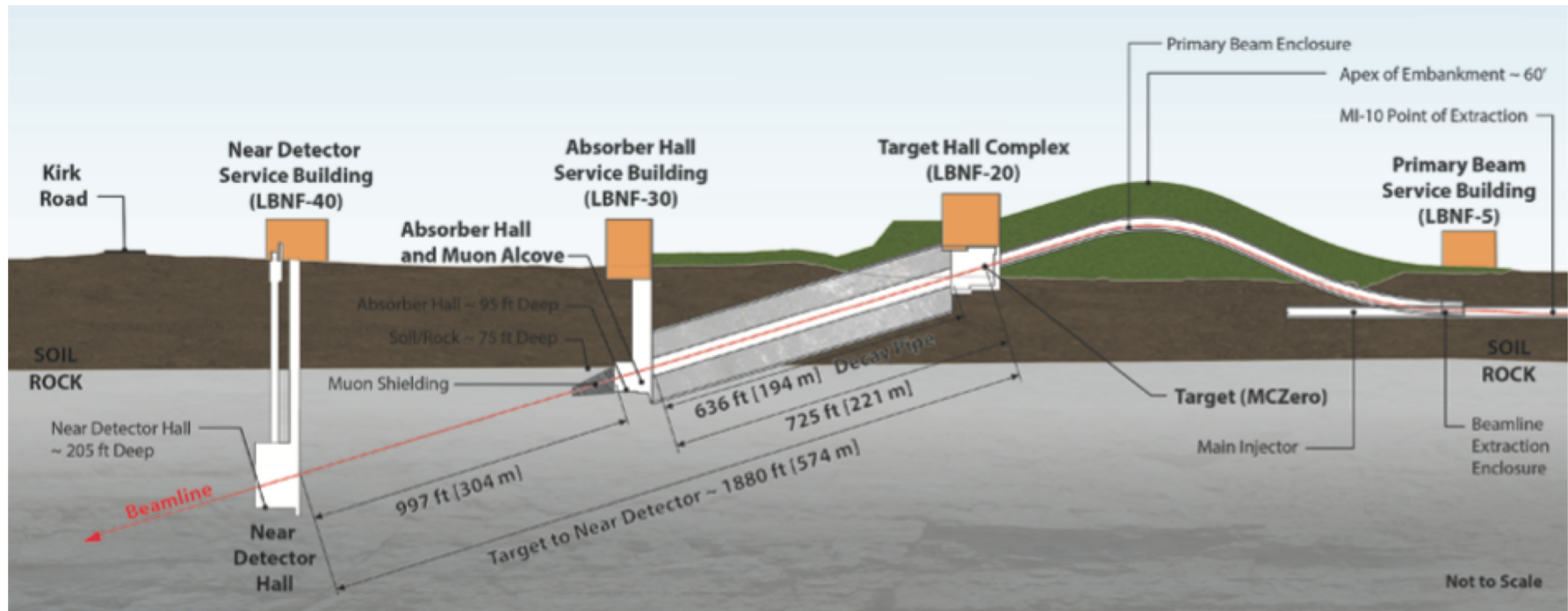
from "How the Grinch Stole Christmas" by Dr. Seuss



Detecting Light Dark Matter at Accelerators



ν BDX-DRIFT at DUNE



A Rainwater Collection and Cleaning System

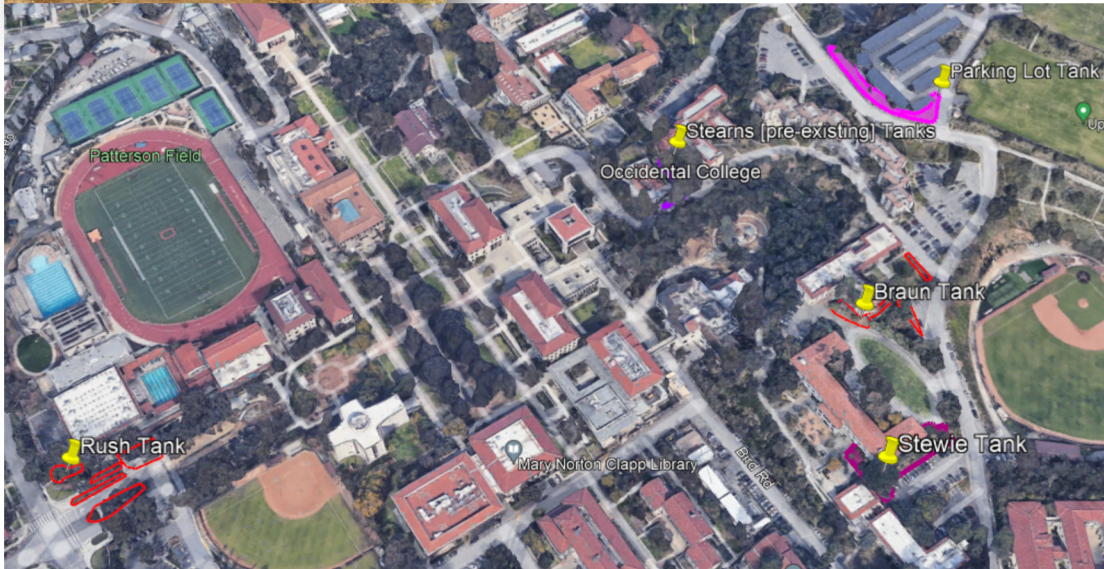


Rainwater Collection



Tank sizes and placement

- Working with with Leigh Jerrard from Greywater Corps
 - Can install 5000 gallon tanks at each collection site
- Need to collect ~100,000 gallons per year to clean the array to 100% efficiency



- If we collect and irrigate around Braun, Stewie, Stearns, Rush Gym, and the array over the parking lot, we could collect around 71,000 gallons per year

Cleaning System



Just hired a contractor for this

Happy to Talk

- If interested please send me an email (iff@oxy.edu), tell me which project interests you and why.