

PSD MIXER AUGUST 2021

: Friday, August 27th, 2021

: 2:30pm

: via Zoom

: Turn on your camera if you're comfortable

: Pets, kiddos, plants, etc., are encouraged to make appearances!

ZOOM

<https://ubc.zoom.us/j/69119471916?pwd=WDJkN0xZTDJJSm5ldE1YVjZWVERuQT09>

Meeting ID: 691 1947 1916

Passcode: 042197

BY PHONE

Join by Telephone - For higher quality, dial a number based on your current location.

Dial: Canada:

+1 778 907 2071 (Vancouver)

+1 647 374 4685 (Toronto)

+1 647 375 2970 (Toronto)

+1 647 375 2971 (Toronto)

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+1 438 809 7799 (Montreal)

+1 587 328 1099 (Alberta)

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PLEASE KEEP YOUR MICS
MUTED

“WHAT’S THE GIST, PHYSICIST?”

Join us for another Friday afternoon of division updates, science, and community!

Agenda:

- Division updates w/ Petr (~10 min)
- Q+A w/ Petr (~5 min)
- Social Activity (~10 min)
- Science Talk: “The beta-decay puzzle, take two” -Jason Holt (~20 min). Abstract below!

β -decay, the familiar process that changes a neutron into a proton (and vice versa), is the dominant decay mode of atomic nuclei and offers a unique window to physics beyond the standard model. With the 50-year “quenching” mystery now seemingly solved, we turn to an even more elusive challenge, that of hypothetical neutrinoless double-beta decays. With deep-underground facilities currently strategizing next-generation searches, nuclear theory has largely left the community waiting in the dark for reliable matrix elements: theoretical quantities that encode the complex and, until recently, uncontrolled nuclear-weak physics governing the rates of these decays. Can ab initio theory bring the long wait to an end and deliver next-generation matrix elements for all relevant nuclei?