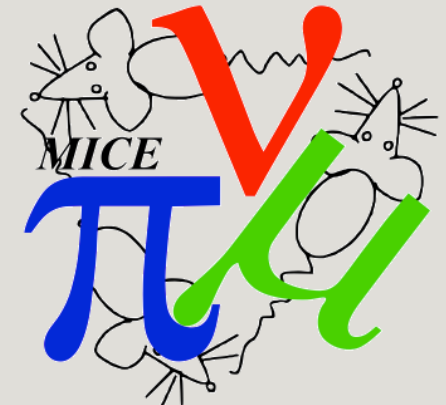


ANALYSIS OVERVIEW & “THE MISSING PHYSICS”

V. Blackmore

CM38

23rd February 2014

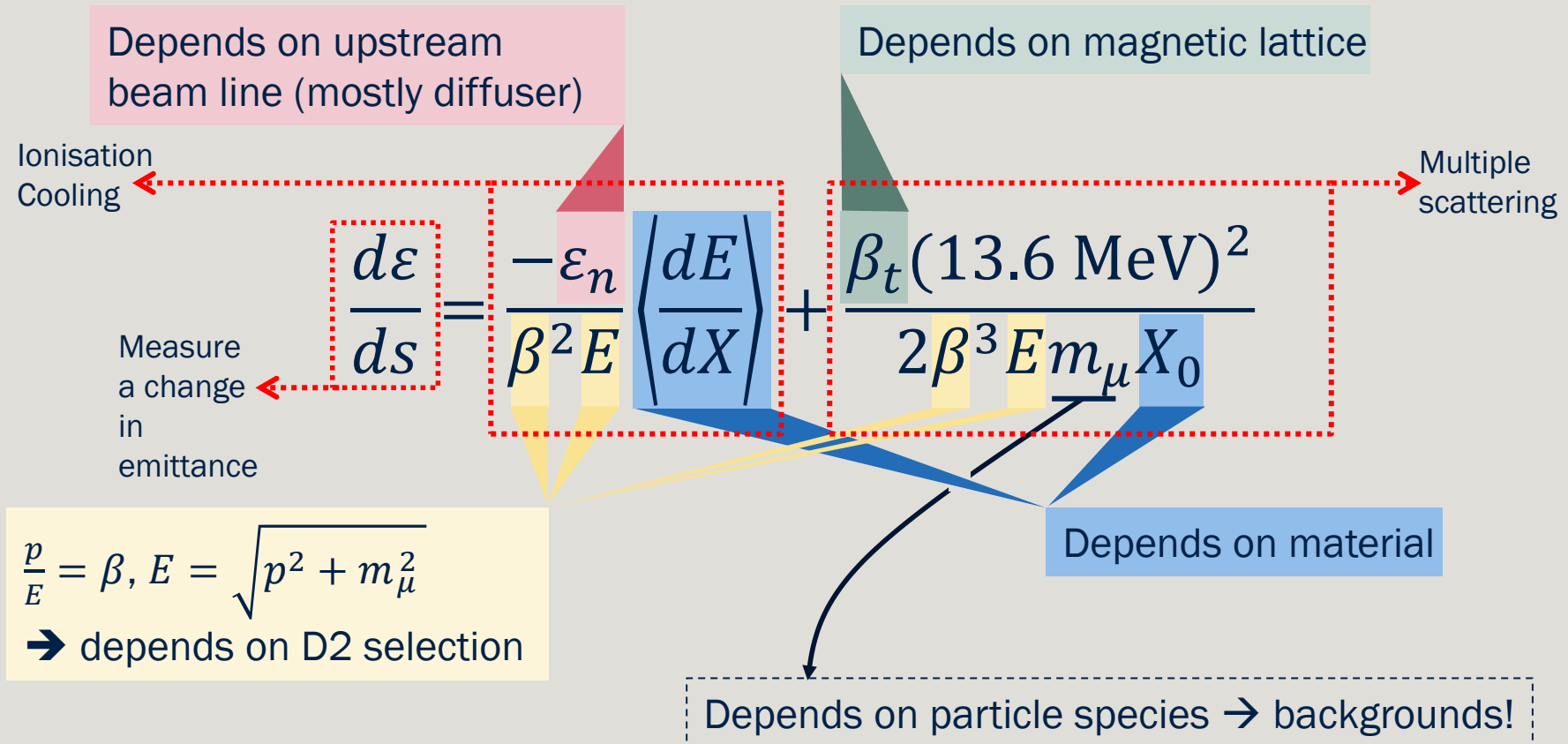


Purpose of this talk...

- You will hear about
 - Our (physics) readiness for carrying out Step IV
 - Our (physics) preparations for Step V or Step VI
- This talk is what you will not hear about.
 - If there's something that is mentioned in none of these talks, then it truly is “missing physics”
 - Everyone is encouraged to think about their favourite physics topic and what we are (or are not) doing to satisfy that.

Analysis at Step IV

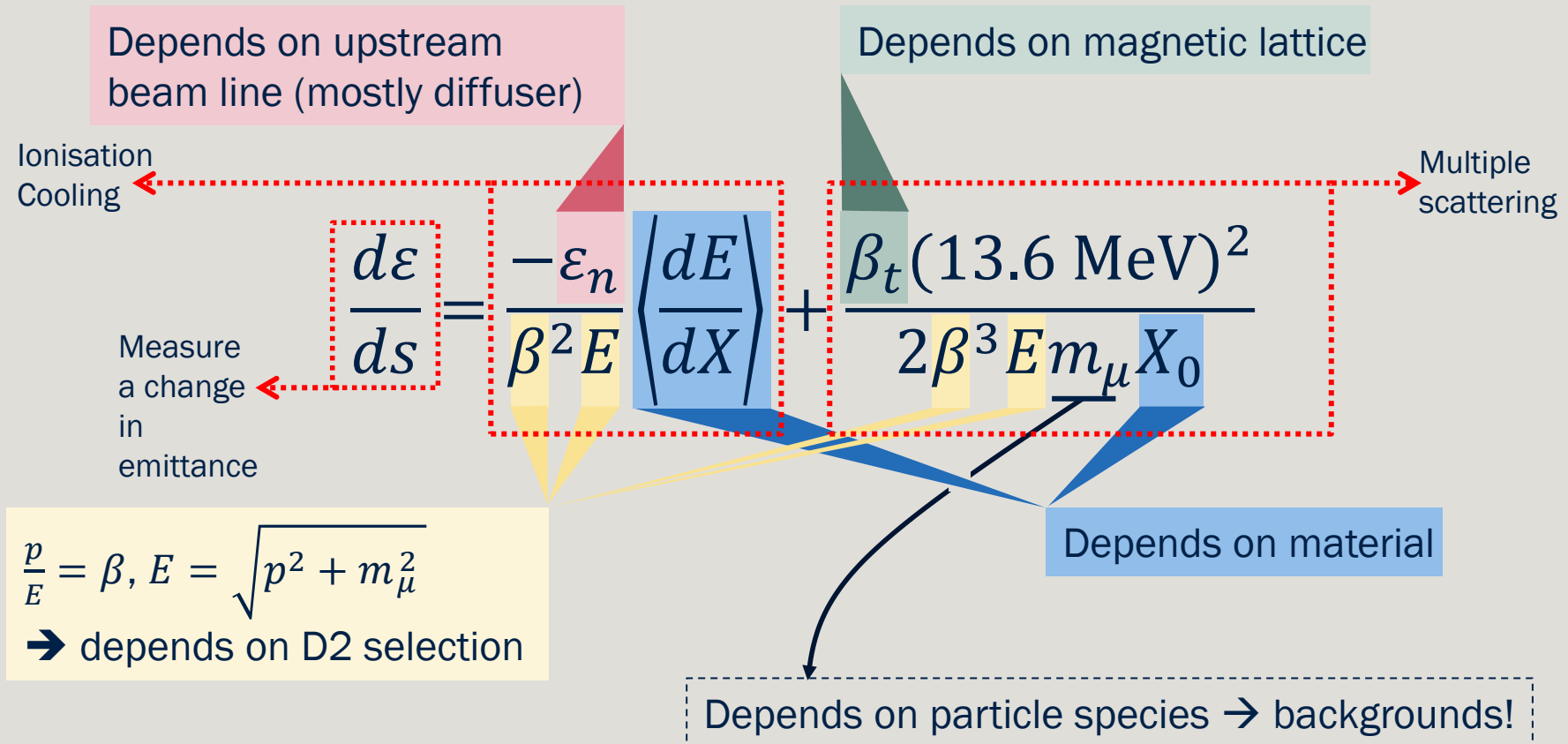
- A full and definitive exploration of the ionisation cooling equation
 + Proof that we can *predict* it
 + Proof that we can *measure* it



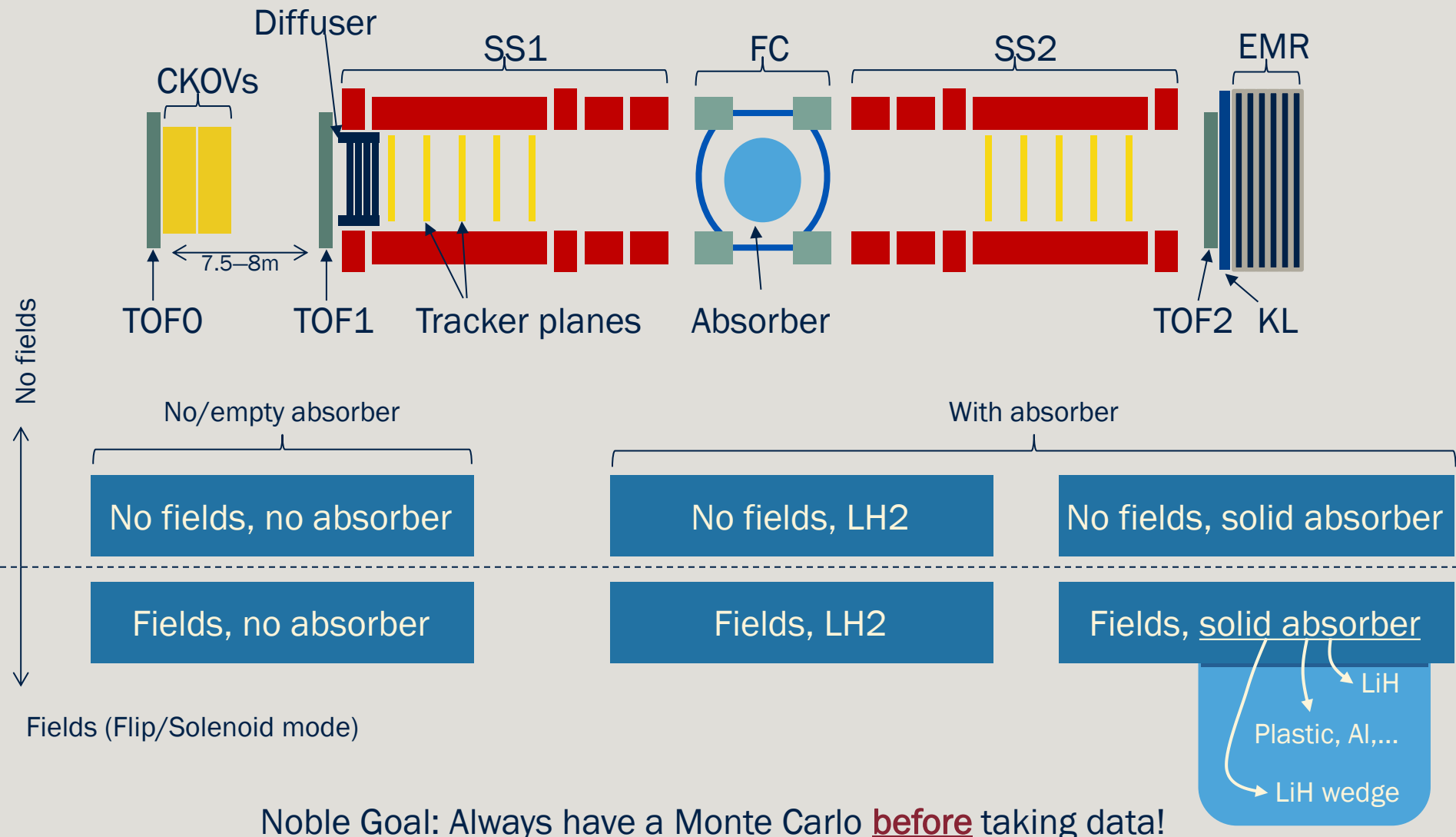
Analysis at Step IV

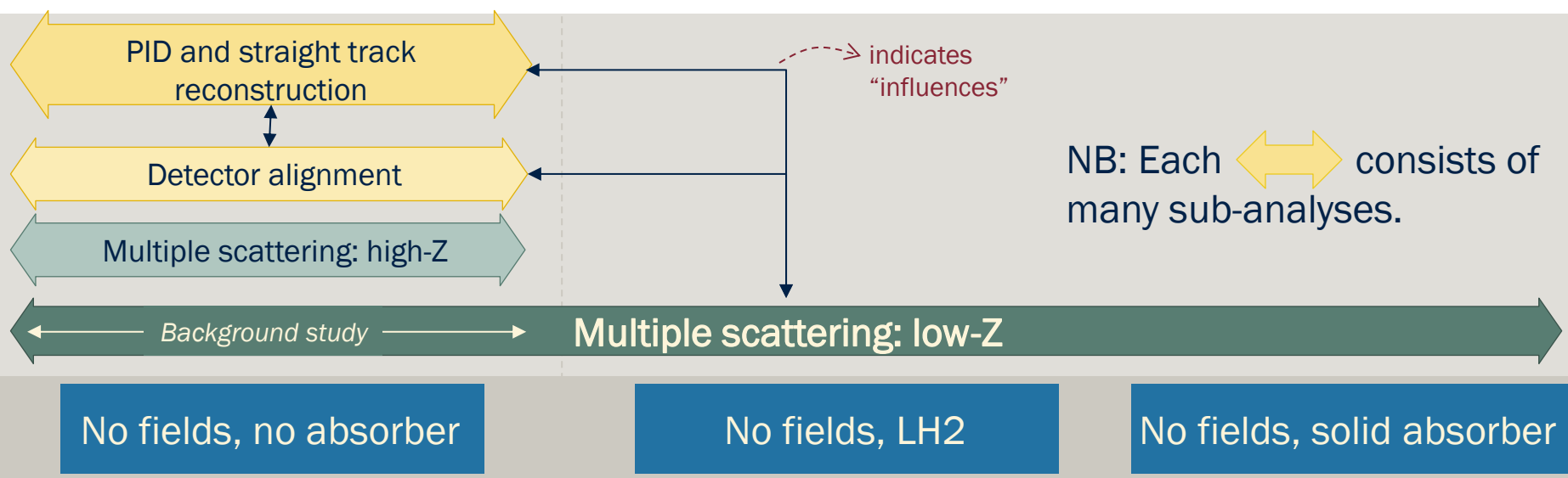
famous last words!

“Sounds simple enough...”



Step IV Operating States

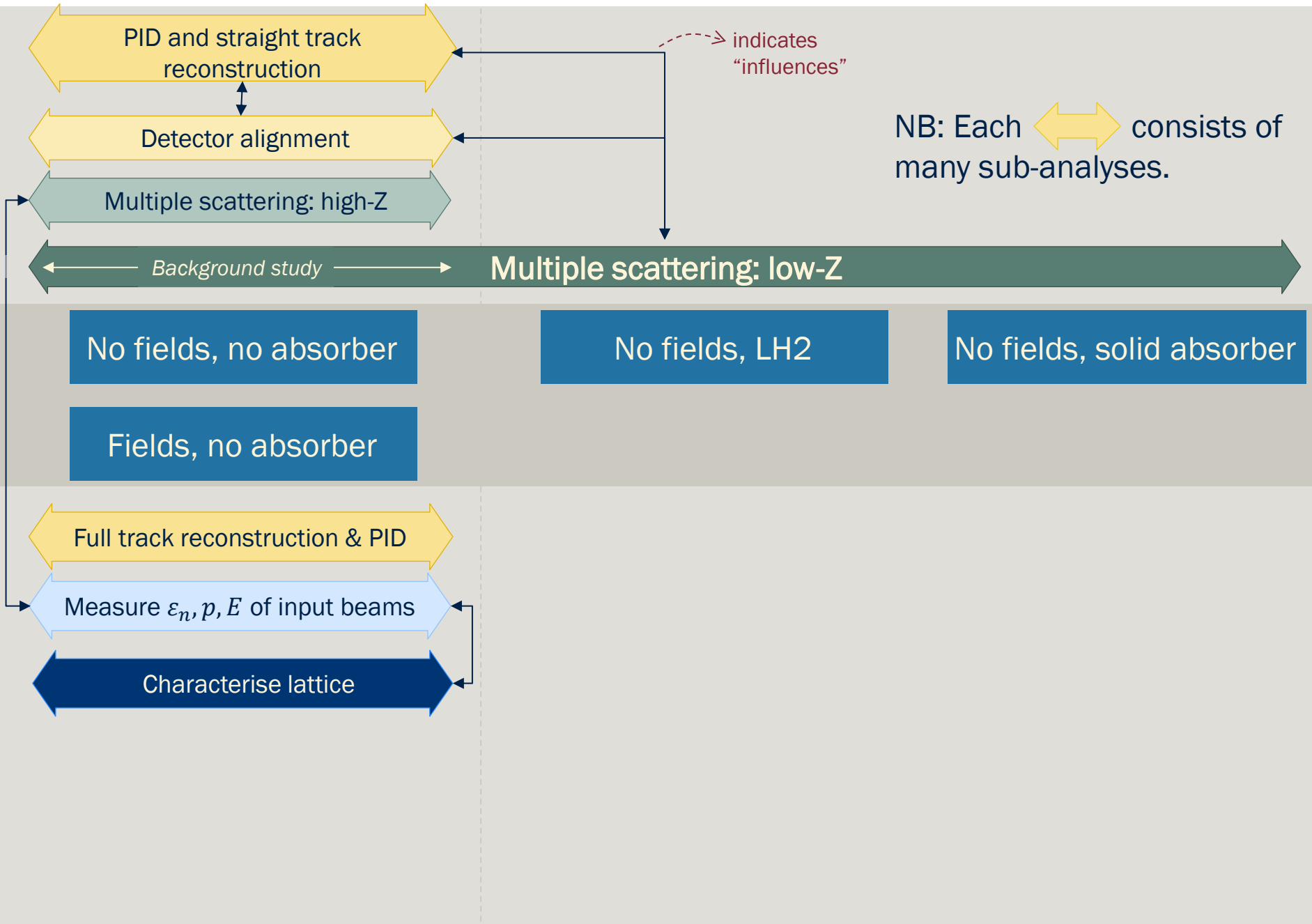


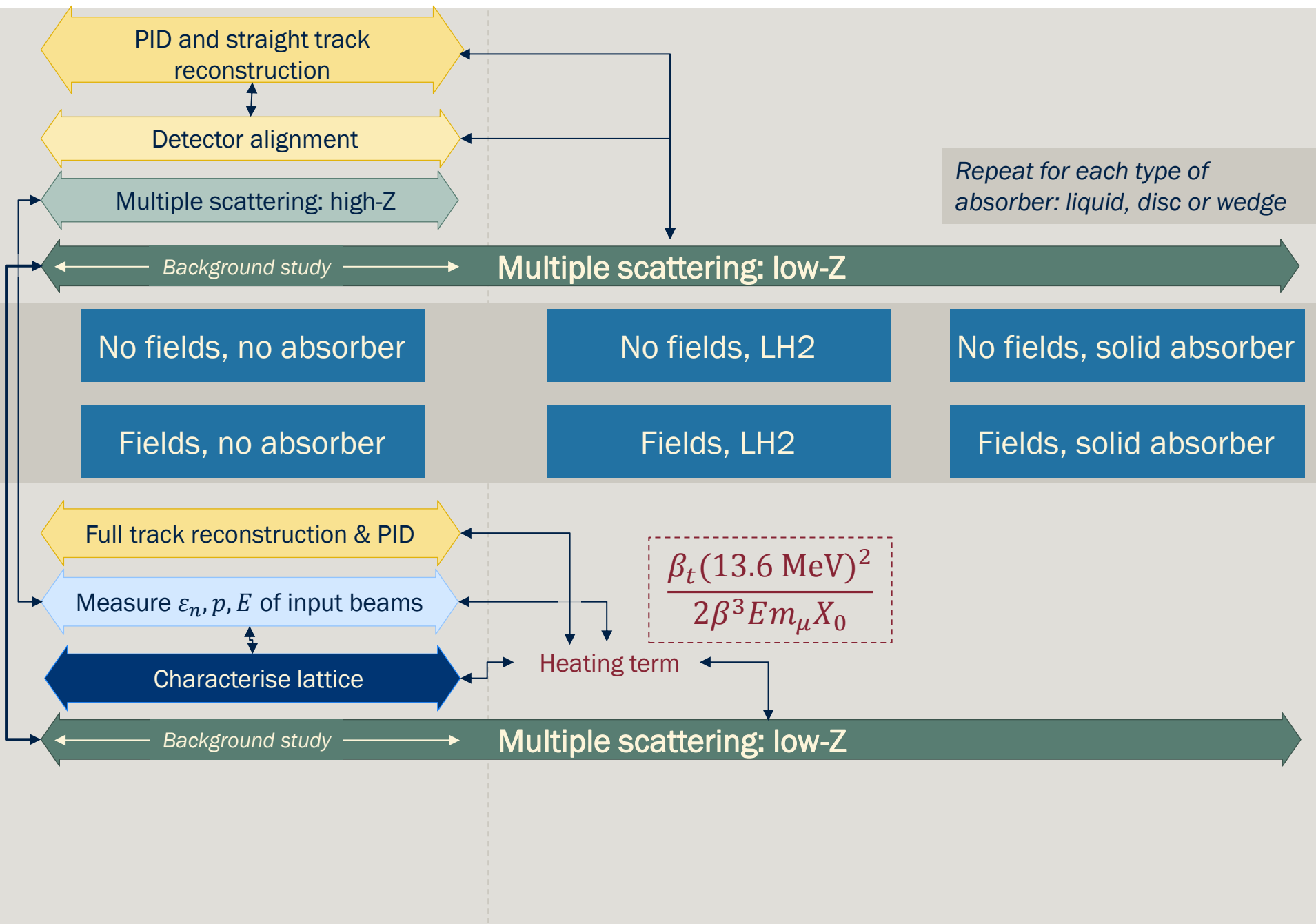


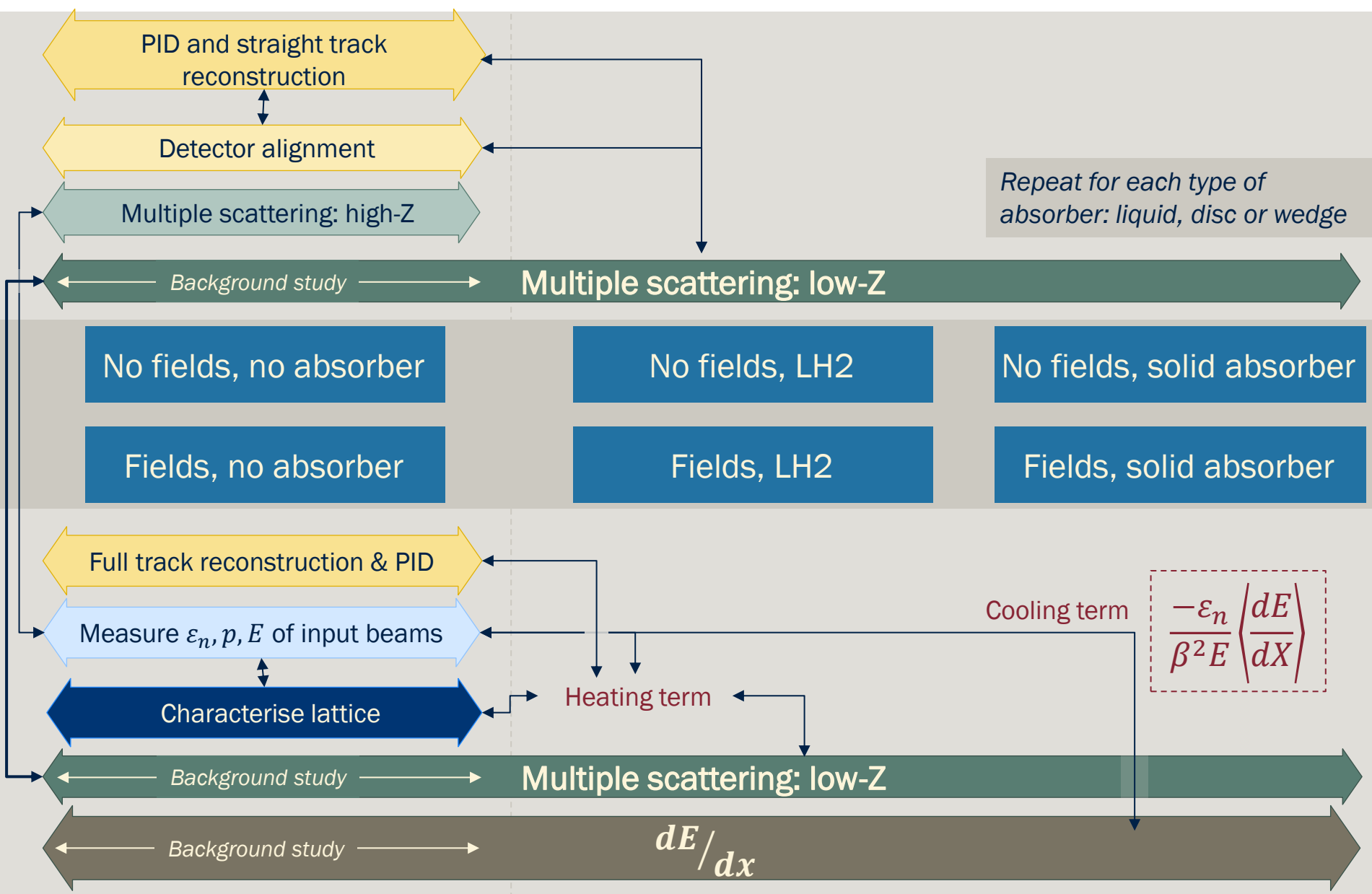
No fields, no absorber

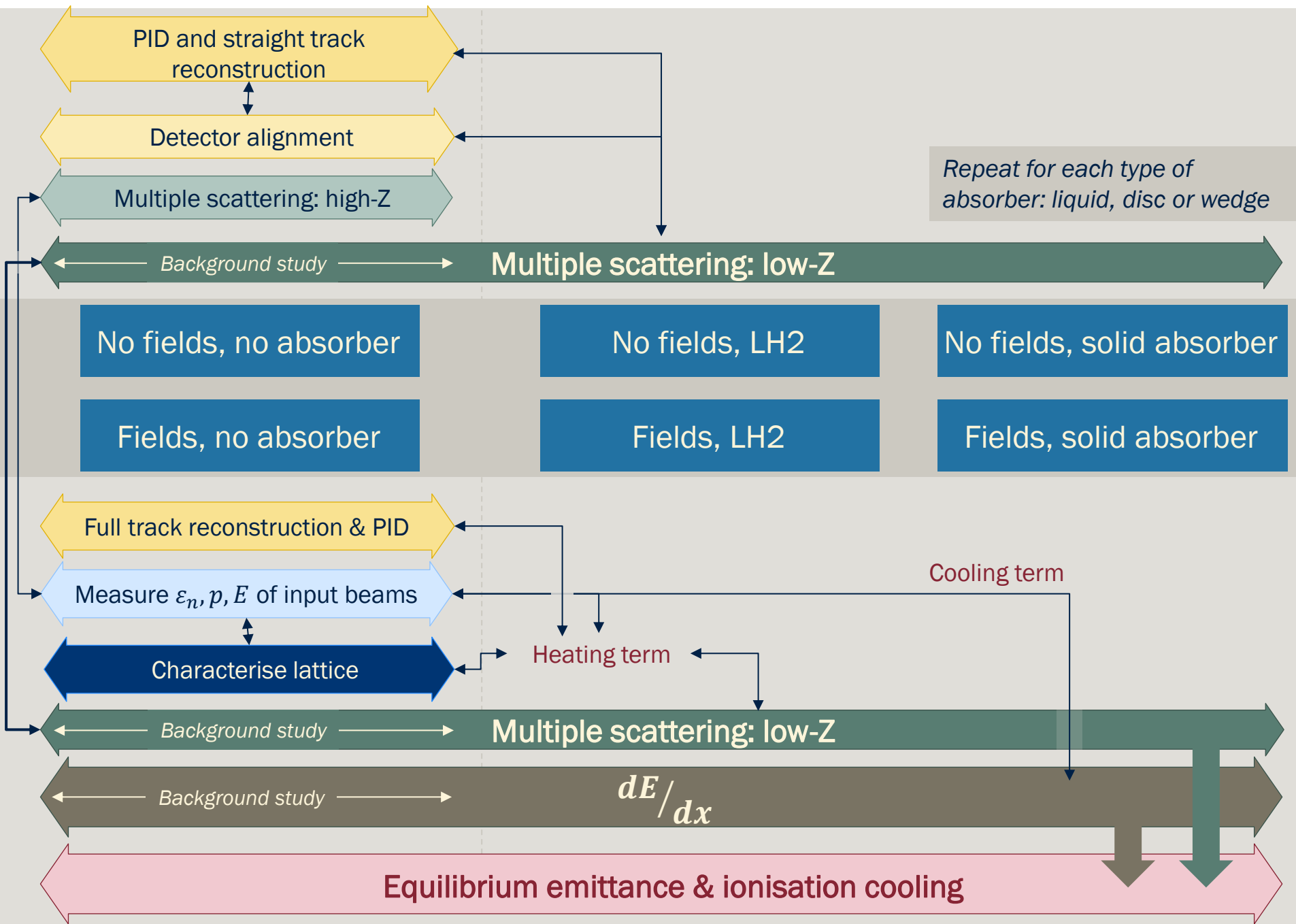
No fields, LH2

No fields, solid absorber



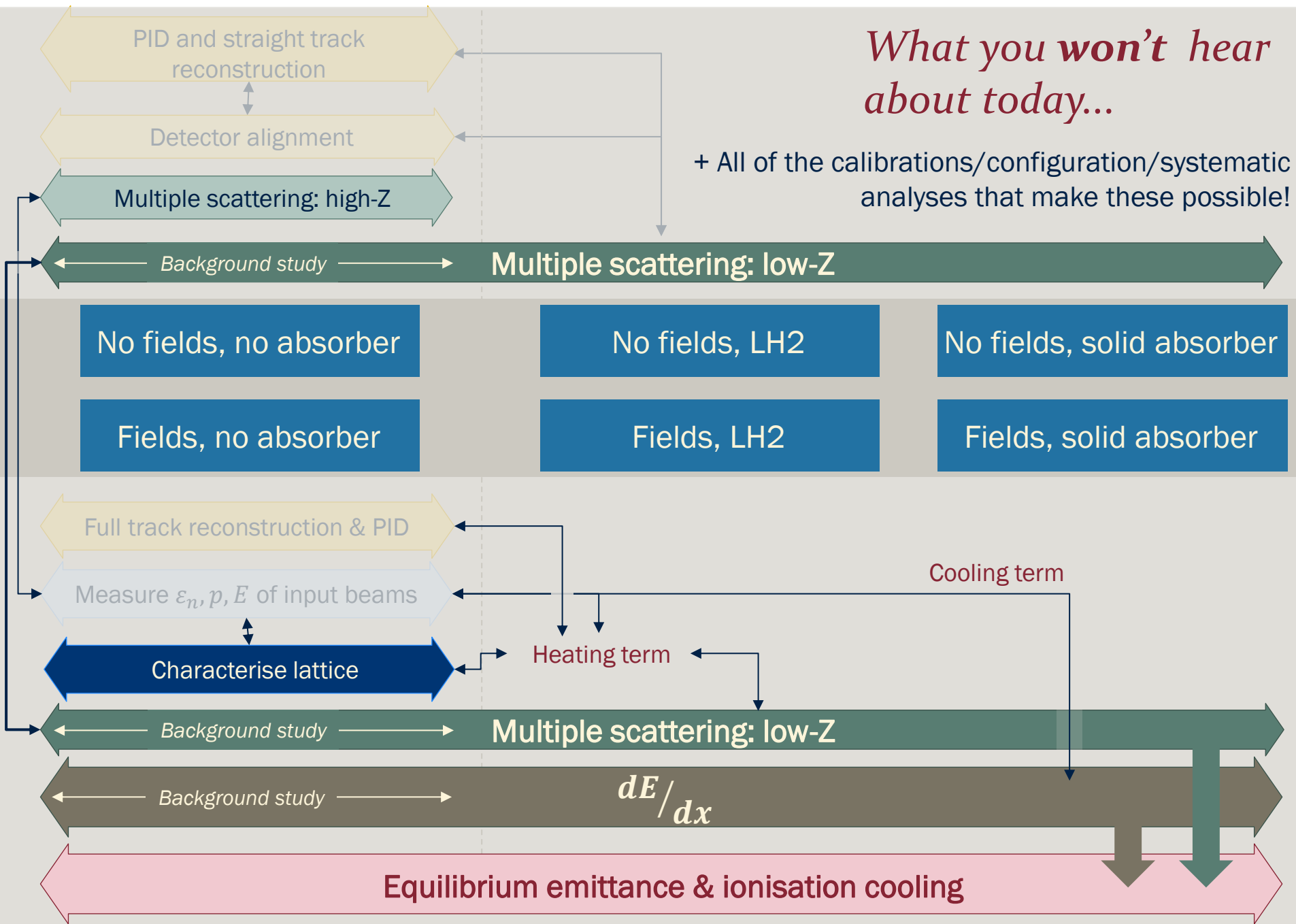


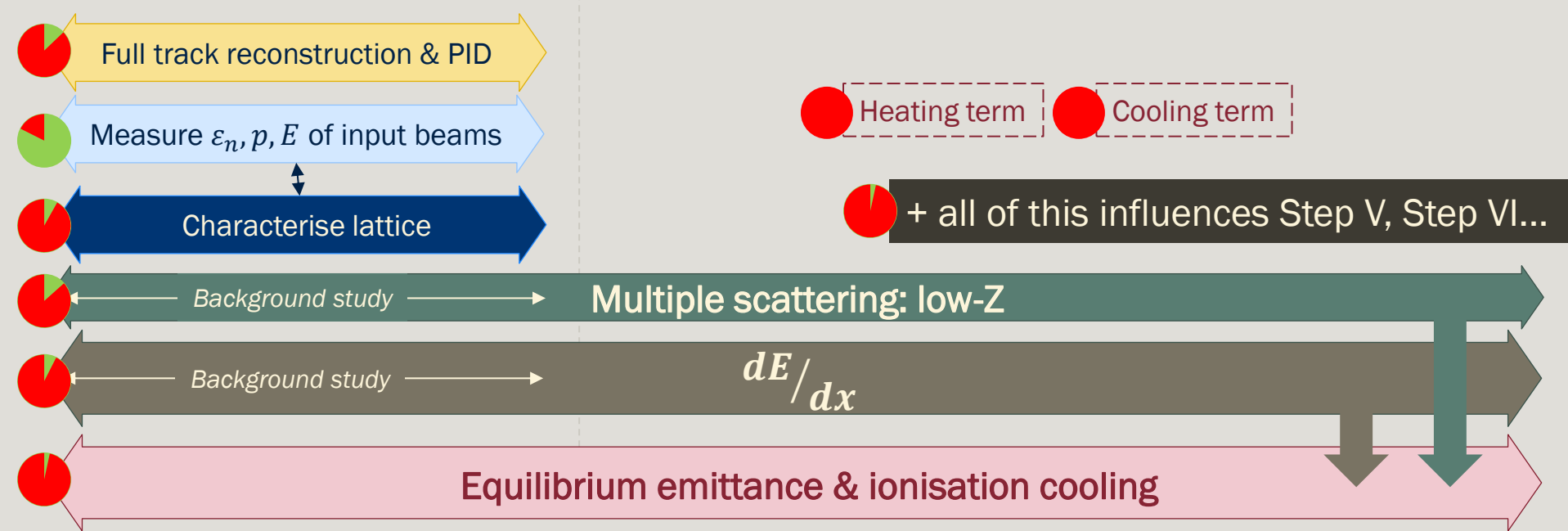
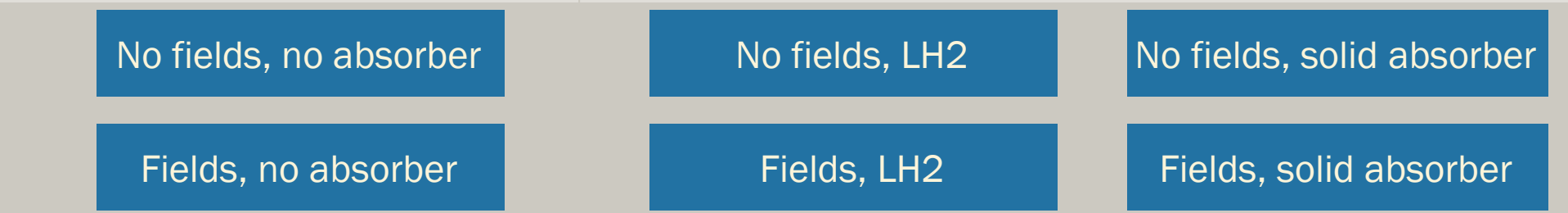
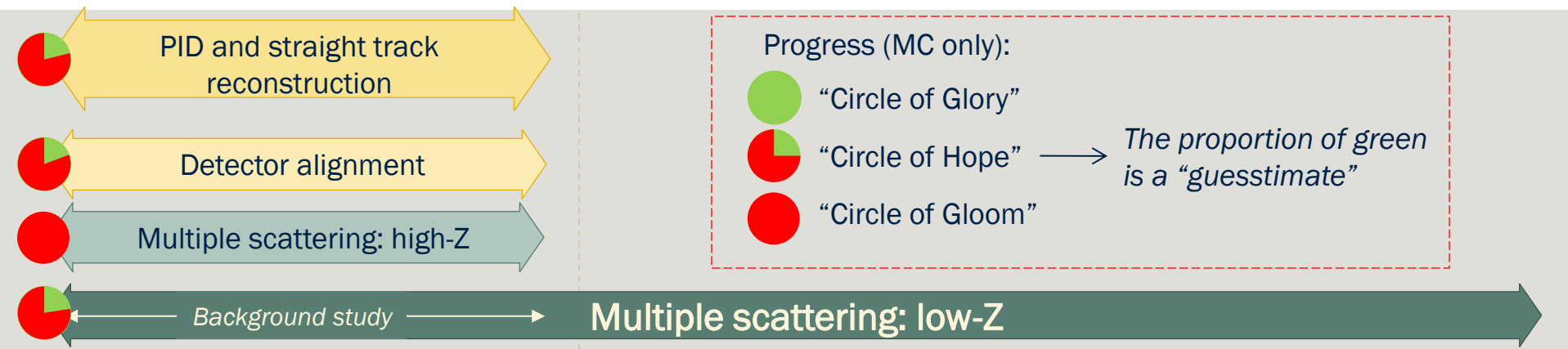




*What you **won't** hear about today...*

+ All of the calibrations/configuration/systematic analyses that make these possible!





Summary

Photograph's from "The Secret Life of Harvest Mice", taken by Jean-Louis Klein and Marie-Luce Hubert



- Thank you to

Asfandiyarov, Blondel, Carlisle, Cobb, Dobbs, Drielsma, Hanlet, Kaplan, Lagrange, Leonova, Long, Middleton, Nugent, Orestano, Overton, Pasternak, Pidcott, Popovic, Rajaram, Rogers, Santos, Soler, Snopok, Speirs, Taylor, Uchida

who have balanced physics analyses with their other responsibilities and provided us with support.

Summary

As seen by a common harvest mouse

Everyone is welcome to do physics, no which mouse you are

Photograph's from "The Secret Life of Harvest Mice", taken by Jean-Louis Klein and Marie-Luce Hubert

There's a bit of physics for everybody



With everyone's support, we'll get to our goals



Analysis meetings are full of discussion