

QM: The good, the bad, the ugly

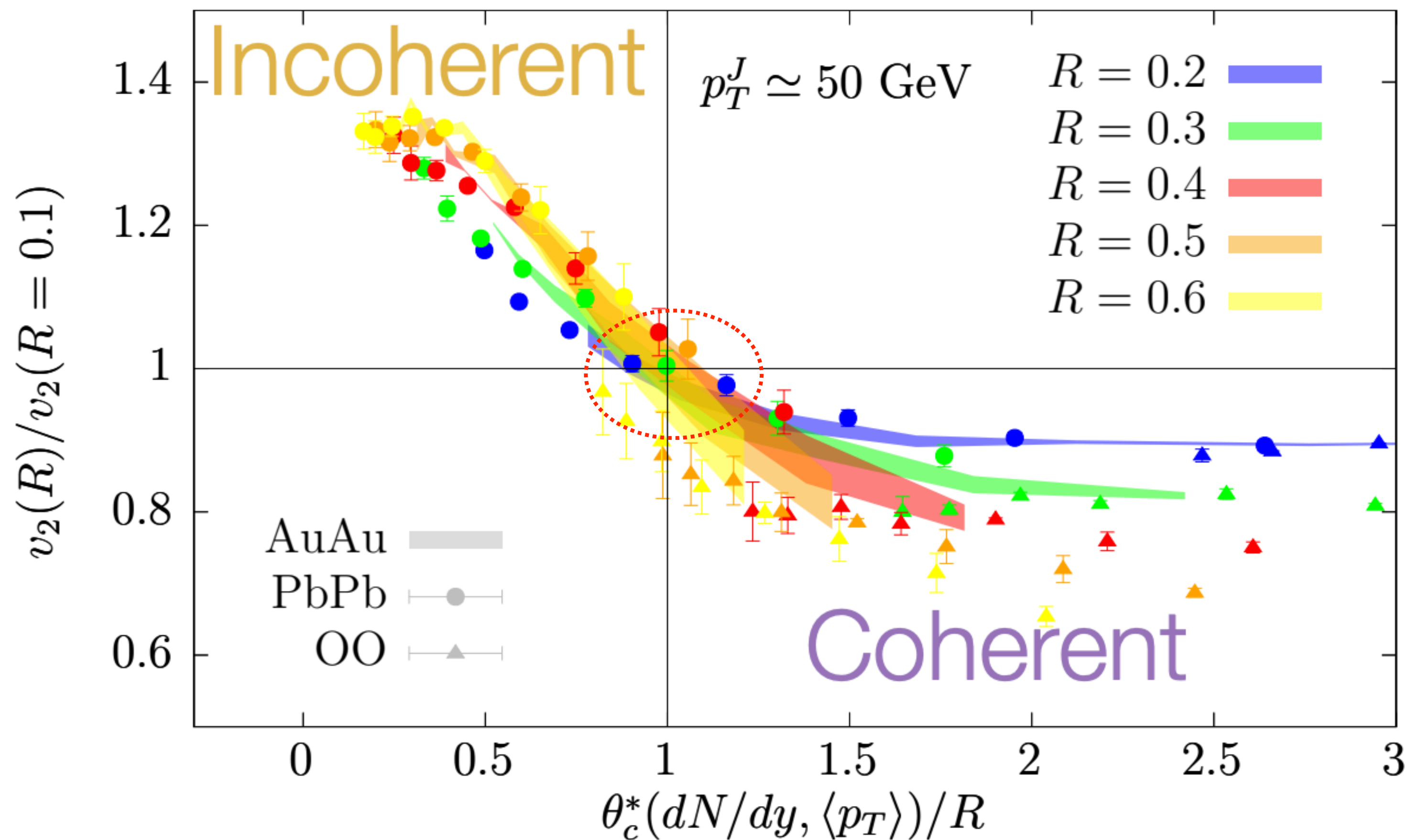
Hannah Bossi (MIT)

April 18th, 2025



The good

[[Talk by Alba Soto-Ontoso](#)] [[Backup slide from talk by Adam Takacs](#)]

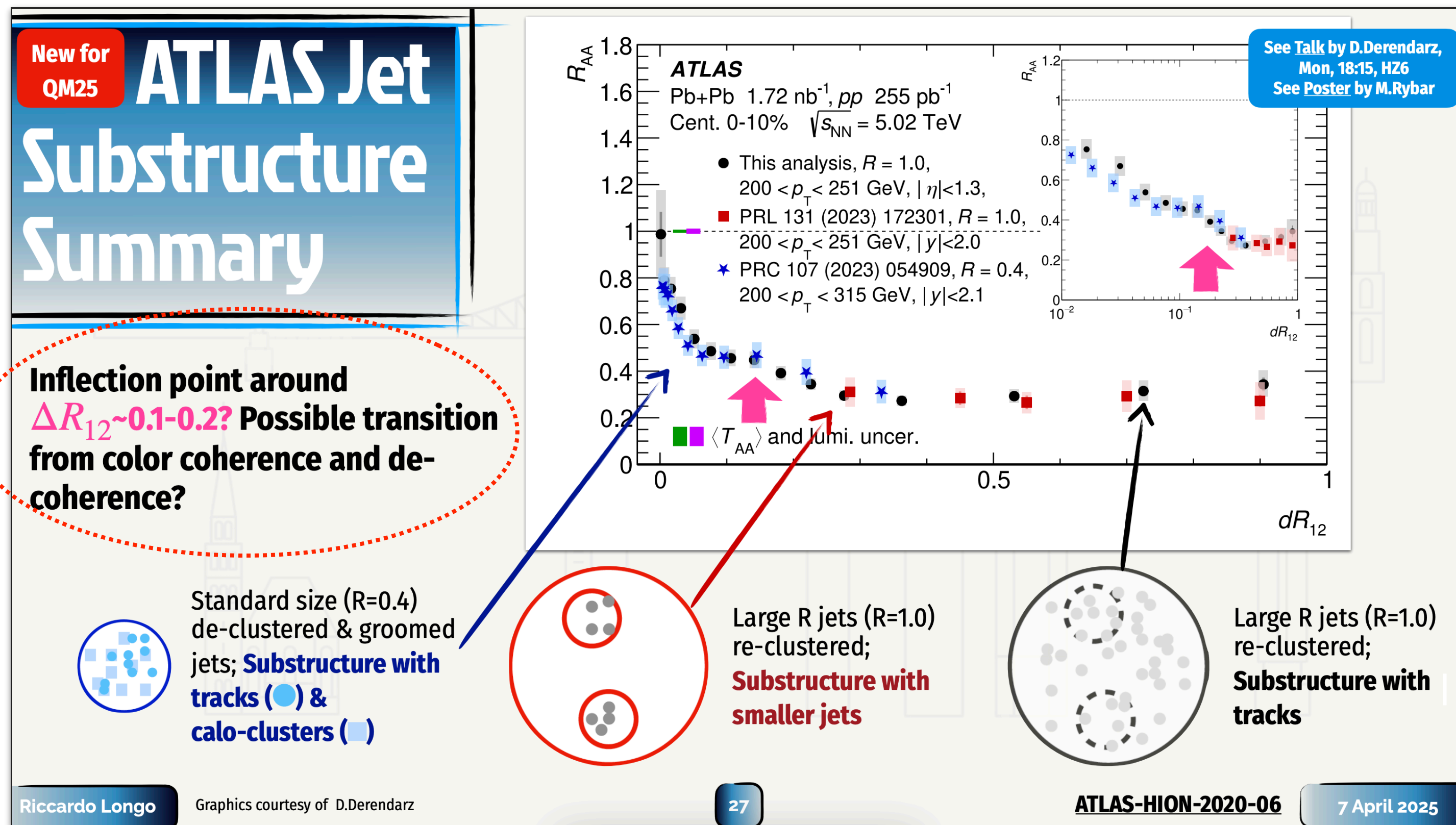


- Jet v_2 double ratios (wrt $R = 0.1$) as a function of the angle normalized by R .
- Crossing point of double ratio with unity allows for experimental extraction of coherence angle.

- Pros: Experimentally (relatively) easy (info visible without going to large R), extraction of coherence angle that is not model-dependent.

The bad(ish)

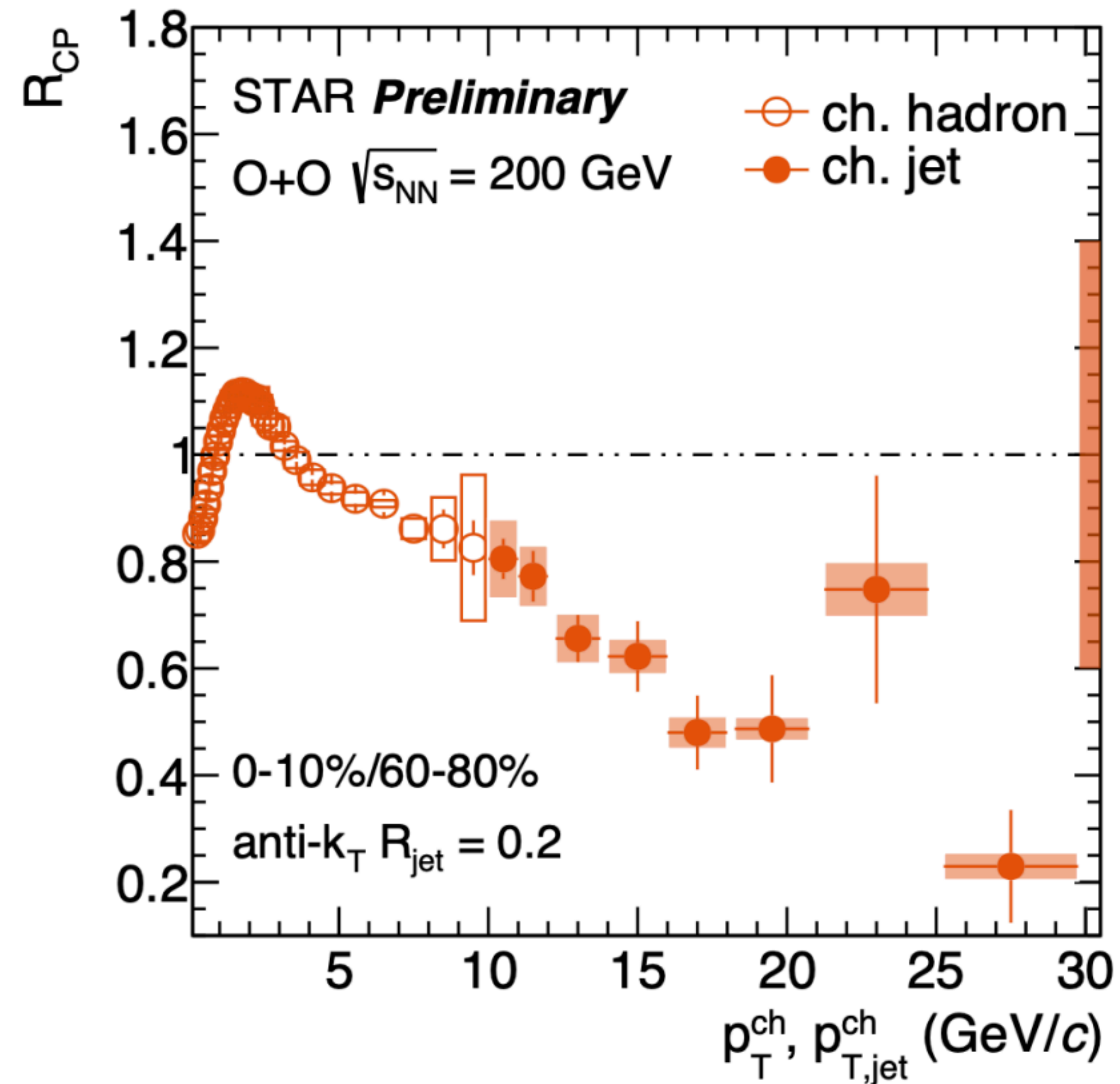
[\[ATLAS Overview by Ricardo Longo\]](#) [\[Talk by Dominik Derendarz\]](#)



- **Cool measurement** with **dangerous overstatement** of conclusions in plenary talk.
- **Why it's cool:** impressively differential measurement that does have sensitivity to coherence angle (sets a bound on where it can be) and corroborates narrowing picture.

- **Why it's dangerous:** changing of q/g fractions can cause very similar inflection points.

The ugly [\[Talk by Sijie Zhang \(STAR\)\]](#)



- Many irresponsible things...
- No proper evolution of the centrality bias in the different centrality classes.
- No pp reference (apparently ever? 🤔)
- Comparing charged hadron p_T to charged jet p_T on same plot (10 GeV charged hadron does not come from a 10 GeV charged jet)

- Peak irresponsibility: **“Hint of jet quenching in OO”** (way too early to make this claim)

Also ugly [\[Talk by Sigurd Nese \(ALICE UPC D0\)\]](#)

Backup (Honorable Mentions)