High-energy reconstruction of single and double cascades using the KM3NeT detector

What is this contribution about?

This contribution is about the direction reconstruction of single and double cascade topologies in the KM3NeT detector.

Why is it relevant / interesting?

A good angular resolution on cascade events offers encouraging opportunities for neutrino source discovery.

What have we done?

We present new reconstruction algorithms that use the timing information in the direction reconstruction of cascades.

What is the result?

The angular resolution for single cascades improves significantly and reaches sub-degree resolution. The angular resolution for double cascades drops below 1 degree for tau lengths larger than 25 meters.