Mapping of air-shower observables

Observables

- "Direct" D (e, μ, γ, $\hat{C}$, radio, etc)
- "Reconstructed" R (E, X_{max}, N_μ/N_e, etc)
- "Virtual" V (EM component, hadr.component, $\ln A$, etc)

Mapping

- Calibration (hardware response) $D \to R$: provided by experiments, but can be change on the flight by the *end-user*
- Models $V \rightleftharpoons R$: provided by experiments (reconstruction methods), theorists (proposed methods), *end-users*
- Mapping can be implemented, indexed with DOI and cited in papers
- *Implementation is stored and accessible using proposed framework*

Proof-of-principle: $E_{\mathrm{KG}} \rightleftharpoons V_{\mathrm{EM}} \rightleftharpoons D_{\mathrm{radio}} \rightleftharpoons V_{\mathrm{EM}} \rightleftharpoons E_{\mathrm{Tunka}}$