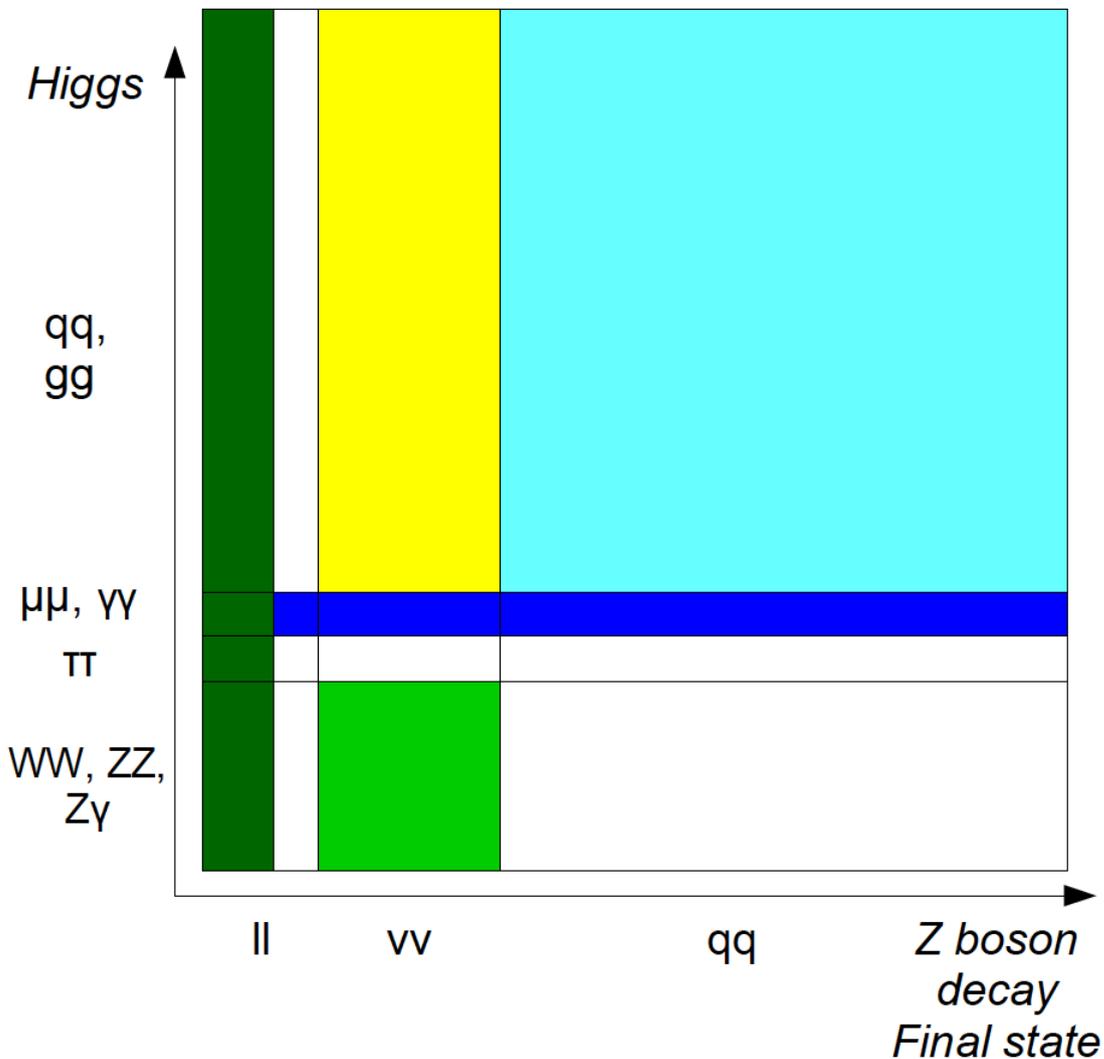# Detector design & physics study: Goal

- To understand the physics performance & physics requirement

- To prepare the technologies & Integration

- To deliver a reliable Design: Conceptual, Technical, Engineering

Topics

- Physics

  - Higgs studies is covered at full simulation level in CEPC-v1

  - CDR Baseline Geometry + Alternatives: Benchmark analyses iteration

  - EW & Systematic Control

- Sub-detectors: Realistic Modeling & Digitization + Integration, i.e, Cooling, thermal simulation, etc

- Software & Computing

  - Common efforts toward reconstruction AND framework

  - Services: Validation, release, etc

  - Data access & Computing power limit

- Limited by Manpower, Computing power and expertise – Need efficient cooperations

Optimization Benchmarks