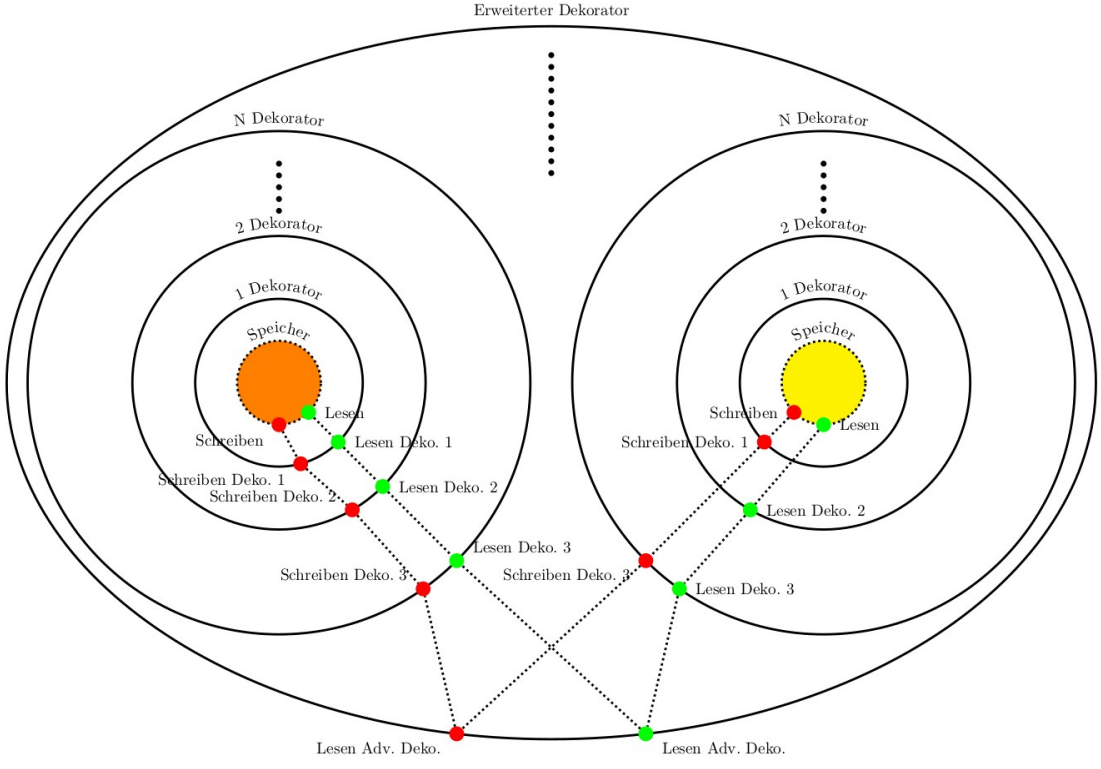
Dynstack Stack

- Decorator Design Pattern
- Complete decoupled particle and storage
- Only one type of particle storable



Speed up Corsika

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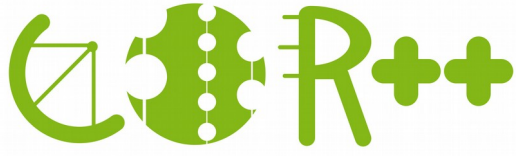
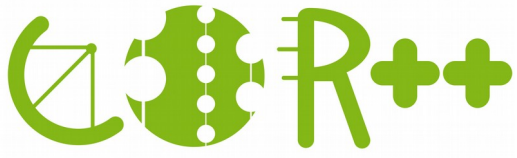
Dynstack Particle



https://github.com/tudo-astroparticlephysics/Cor-PlusPlus/blob/master/basic/include/corsika/particle.h

- Variadic template
- make_particle<data::basic , data::custom, 3,
  data::curved, data::multithin>();
- Enums to access data → particle[impulse_x]
  or get / set

Dynstack Stack



- FiFo / LiFo Storage
- Callback
- Arbitrary Sort
- Splitting
- Removal

Corsika 8

- Stack is currently linked to stored particles (getter/setter)

- Naming convention similar to container:
  - clear, resize, erase
  - push_back, emplace, insert
  - pop_back, back
  - iterator, const_iterator
  - begin, end
  - empty, size, max_size, reserve

- Templates: