

# Propagator Interfaces

RungeKuttaEngine:

- Fulfills IPropagationEngine interface

```
virtual ExtrapolationCode
propagate(ExCellCharged&
          const Surface&
          PropDirection
          std::vector<ExtrapolationMode::eMode> purpose
          = {ExtrapolationMode::Destination},
          const BoundaryCheck& bcheck
          bool
          ecCell,
          sf,
          dir = alongMomentum,
          = true,
          returnCurvilinear = true) const = 0;
```

“New” Propagator:

- Templated on Implementation  
“AtlasStepper” or “EigenStepper”

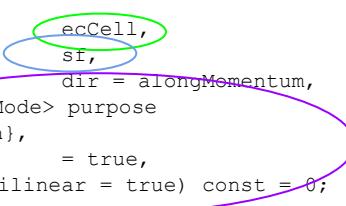
```
/// @brief propagate track parameters
template <typename TrackParameters,
          typename Surface,
          typename ObserverList,
          typename AbortList>
obs_list_result_t<
    typename Impl::template return_parameter_type<TrackParameters,
    Surface>,
    ObserverList>
propagate(const TrackParameters& start,
          const Surface& target,
          const Options<ObserverList, AbortList>& options) const
```

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