Revisions for HELIOS: 10.0.0

- Added option to specify the radiation sink in terms of leakage area *A(t)*. The radiation energy lost by the system in a time step *n* is defined as $A(t)cU^{n+1}\Delta t/4$, where *U* is the radiation energy density.
- Added support for large SESAME tables with up to 1 million words.
- Added initial support for SESAME ASCII2 format.
- Several significant changes in physics modules that affect CR simulations have been implemented. For more information on the models please refer to an appendix in the documentation titled "Physics Models Improvements April 2024"
  - Photon energy grid refinement for both photo-absorption and spectral modeling.
  - Continuum lowering model avoids destroying transitions just below the ionization threshold.
  - Including more line wings in bound-bound emissivities.
  - Extrapolation of photo-ionization cross sections below depressed ionization potential.
  - Automatic adjustment of time steps for non-local time dependent population solver.
- Bug fixes:
  - For automatic zoning, fixed inconsistencies in determining masses/zone widths at the material interfaces.
  - Fixed energy conservation issues for simulations with the radiation sink.
  - Simulations with the radiation sink are now thread-safe.

- *HydroPLOT*:
  - Bug fixes:
    - Previously, when plotting Incident Flux or Incident Radiation Drive Temperature (Time tab, under Fluxes, for a given boundary), only the inner boundary (Rmin) values would be plotted, even when choosing the outer boundary. This has been fixed. (This was a problem only for plotting, not for Helios itself.)
- *EOS and Opacity Viewer*
  - Added support for large SESAME tables with up to 1 million words.
  - Added initial support for SESAME ASCII2 format.