

New Features CadnaR – 2018 MR 1

- Calculation/Configuration
- **CadnaR-Objects**
- Further New Features
- Miscellaneous
- Import/Export
- **CadnaR-Options**

Calculation | Configuration

- Recalculation of STI at receivers (**Extras** menu, requires option AUDIO): changing the noise level spectrum does not require a recalculation of the echograms, but just of the STI values (increasing calculation speed).
- An individual noise level spectrum per variant can be specified for receivers (access via the user-defined **Receiver** table with additional columns for new attributes, new option „prefer noise level from receiver“ on “RIR-Evaluation“ tab)

CadnaR-Objects

- direct graphical input of rotated box-type objects (box-type obstacle, box-type source): Input using 3 points, using 2 points generates an axis-parallel object.
- object „Symbol“: additional symbol types „Caption: Grid“ and „Caption: Objects“ selectable
- object appearance (**Options** menu): color selection with access to local/global library of color palettes

Further New Features

- new graphical user-interface:
 - scalable object icons (on toolbox and on toolbar)
 - scalable font in dialogs (**Options | Miscellaneous** menu)
- dialog **Grid Arithmetics**: now with access to cni-files and addressing grids in variants
- new Library Object: Color Palette (used for **Grid Appearance**)
- new dialog **Grid Appearance**: selection of color palettes for each evaluation parameter group (Default (i.e. level), Reverb Times, STI/STIPA/CIS/D50, ALcons)
- values at grid points now with 0 up to 2 decimals depending on the evaluation parameter (e.g. displaying STI on the grid)
- new Library Object: Product Library (local+global), storing absorption coefficients of products
- dialog **Absorption Spectrum** (local+global) extended for optional use of referenced products and corresponding conversion into effective absorption spectrum

Miscellaneous

- Particle-Pingpong with the hybrid modell: inactive particles (resulting from the image source model) now displayed as small grey points (3D-View, menu command **Appearance | show inactive particles**)
- extended keyword #(Table, ...): export/output of tables for spatially averaged reverberation times (for active variant: RGTnachIP, RGTnachIPK, for all variants: RGTnachVarIP, RGTnachVarIPK)
- input of two user-defined reference reverberation time spectra possible (displayed in the **Reverberation Time** diagrams)
- user-defined value range for reverberation times in diagrams
- number of decimals X in partial level tables controllable via INI file (section [Main], dBOutPrec=X)

Import/Export

- Sketchup import: now offering an **Options** dialog
- CLF import of loudspeaker directivities (file formats *.CF1 and *.CF2)
- ASCII import for Product Library (**File | Import** menu, „ASCII-Products“)
- Export of results and object data to Word-DOCX and Excel-XLSX (requires option ORG or OFFICE)

CadnaR-Options

- option AUDIO: Recalculation of STI at receivers (**Extras** menu, requires option AUDIO): changing the noise level spectrum does not require a recalculation of the echograms, but just of the STI values (increasing calculation speed).
- options ORG or OFFICE: Export of results and object data to Word-DOCX and Excel-XLSX