List of Modifications: LISE** versions 9.5.* - 9.6.*

9.7  11/01/13

* New official version 9.7

9.6.139 10/17/13

* MARS spectrometer extended configuration in LISE++ package

* Plotting Envelopes with rotation blocks:
  - Absolute and local XY-orientation for MC envelopes
  - Absolute and local XY-orientation for Distribution envelopes
  - Modification: Drawing Block aperture size in MC plots
  - Absolute rotation angle is property of each block and being modified @ void CalcBlock::SetFlags()

9.6.134 10/15/13  "Accept matrix" button in the Wien Optic dialog

9.6.133 10/09/13  Kinematics plot: modifications in axis titles

9.6.132 10/08/13

* neutron and gamma induced reactions in the Kinematic Calculator

* Corrections in transmission subroutines:
  a. modification for large angular straggling @ very low energies : fixed
  b. in the case of materials only previous disperse block was used instead any optical block: fixed

9.6.126 10/03/13

* IMPORTANT!!!! Correction in calculation for transmission through materials
  (so called "unstopped in material" coefficient )
* Gas Cell utility modification
* Correction in Monte Carlo Eloss and Range plots

9.6.123 09/30/13

* Transmission window: new orders, new positions
* Menu "1D-plot" - > "Transmission characteristics" : new parameter "#2 Total isotope transmission"

  * using p,n reaction in DifCS dialogs (TwoBody reaction)

9.6.119 08/14/13

* Help-links in the Kinematic calculators
* Correction in GetT12 for private_line. Crash in Delay block

9.6.117 08/06/13

* Help-link for Charge states from energy in the Mechanism dialog
* Increase of distribution dimension for charge state plots
List of Modifications: **LISE**++ versions 9.5.* - 9.6.*

9.6.116 08/01/13

* New LISE++ block : "Shift"

* Update in block selection at the Spectrometer Scheme

* LISE++ block "Shift" transmission

* Subtitles Correction in W_Graph

9.6.112 07/31/13

* D-line files in LISE++ package

* increase precision in Setup dialog for length, fields, and in LPP-files

* modification for negative angle in ED

9.6.108 07/29/13

* E-dipole - Eom - dimension correction (om_mm)

* Erho solution for ED @ MC, P-solution for Ed @ Analytical

* ShowSetup -- Energy beam format modification

* Equad -- options : matrix keeping, automatical U recalculation, and U-keeping, autom.recalc

* Edipo - matrix calculation in the block

* Edipo - option of automatical matrix recalculation

9.6.102 07/25/13
* Analytical & MC solutions for Electrostatical dipoles
* Erho selection in MC transmission
* Brho-alayzer modification for dispersion
* Equilibrium thickness from SRIM
* Modification Dim & Unit in distributions
* Global revision Beta,Gamma,Brho, Erho functions

9.6.95  07/22/13

* Window Message in the case of error in MC_trans_init_array (for debug)
* Modification WGauge for MCM and creation TStatusBar for MC initialization
* Scroller revision in TWindowList
* The Reaction parameter in MC output file

* new threshold: 30 000 ions for Monte Carlo transmission calculations
* new threshold: 30 000 ions for analytical transmission calculations
* new threshold: 300 blocks available in LISE++

* New address for dynamical menu. New indexation!!!

* Corrections in the "Analytical Calculation" button @ MC transmission dialog
* Erho parameter in MC transmission dialog
* Erho plots
* Correction for the "Beam-Fragment charge states" plot in the case of Stripper

* Electrical dipole Optical Matrix calculation (Electric rigidity selection under construction)
* Validation of all Edit values in the ElectirDipole dialog
* Remember the last input mode (Brho or B) in Optical block dialogs
* New button Fix Brho (Erho) value in the quadrupole dialogs
* New kind of drift: Electrostatic quadrupole (including matrix calculation)
* Glyph button correction in the case of change of Drift type
* The "Ideal magnet" dialog revision

9.6.75  07/11/13

* Correction in Multiple Reactions use (when AF and PF together, and AF is the first)
* Correction in Multiple Reactions use settings at loading the code with lpp.argument
* Correction for message of IsoMode in the Rays Output generator
* E.Dipole - scheme in the Dialog, new parameters Type of Bend, and TorRadius
* Trajectory length cell in all Dipole dialogs (D6, Dip, ED, GFS)
* New drift mode template -- e-quadrupole

9.6.68  07/08/13

* Correction in MC transmission to avoid a crash (sigma-per & NCALC_MC)
* Gauges in MC transmission & checking or memory for case of several isotopes
* Calculation backward transmission (realistic)
* Modifications in Matrix Kinematics (Fission, Two-body reactions)
9.6.63 07/03/13

* Modifications in analytical calculations of transmission and kinematics in the case of Two-body and fission reactions
* Correction in Output MC Rays dialog

9.6.54 06/30/13

* User DifCS in MC transmission
* Writing and Reading User DifCS to/from LISE++ files
* User DifCS at the User CS dialog

9.6.50 06/25/13

* Correction in the MC gate dialog
* Special case in MC transmission, then FCup after Stripper with Charge state option on

9.6.48 06/24/13

* Modification in MC transmission for A/q, A-2q and A-3q parameters
* Modification in MC transmission for plot initialization in the case of large number of distributions
* Charge state checkbox modification in the case of non-zero argument at start-up
* Corrections in MC transmission for negative Vz
  (only positive Vz, previous condition was positive Energy)
* Reconstruction in 2D-kinematic plots in the Kinematics dialog
List of Modifications: LISE** versions 9.5.* - 9.6.*

9.6.44 06/21/13

* Utility menu: Differential cross sections utility, LAB<->CM converter
* Modifications in the Kinematics calculator -- Dif Cross Section file button
* Modifications in the Kinematics calculator (Monte Carlo mode)
* MC transmission -- new parameters Velocity_Z, Velocity_X, and so on

9.6.32 05/28/13     RF-kicker correction in taulise_optic
9.6.31 05/23/13     new PACE4 version 4.20
9.6.30 05/07/13     Modernization of Abrasion-Ablation for Initial Prefragment plot

9.6.29 04/19/13     Modernization of output subtitles in the case of extended configurations
9.6.28 04/19/13     Correction in MC plots due to bug after implementation Input rays file
9.6.26 04/18/13     position in Dispersve plane for beam and fragment charge states

9.6.25 04/17/13     Check button for Charge States in the Status bar

9.6.23 04/16/13     Input of ions rays after target in MC
9.6.21 04/11/13     several locations for output MC file
9.6.20 04/10/13     MC gate optimization; creation of local checkpoints filters
List of Modifications: **LISE** versions 9.5.* - 9.6.*

9.6.19 04/09/13  New A,Z,Q and other fields and filters in MC

9.6.18 04/05/13  Update in dialogs for help links

9.6.17 04/03/13  fix: serious bug in passing material for MC
9.6.16 04/02/13  update of discovery.iso file

9.6.15 03/26/13  correction for graph_text --- charge state, and length of string. was crash
9.6.14 03/26/13  SISSI-LISE configuration and example file
9.6.13 03/25/13  T1/2 error in for 1d-plot
9.6.12 03/25/13  T1/2 error in W_ShowCalc
9.6.11 03/25/13  T1/2 error in Database dialog
9.6.10 03/25/13  links for lise pdf : rotate, edipole, gns, delay blocks

9.6.9 03/22/13  fix for thick stipper in the case Projectile Fragmentation and UP
9.6.8 03/21/13  becomes 9.6
9.5.7 03/21/13  misspelling of "capture" word in the Fusion-information window

9.5.6 03/09/13  modification for dME field 15 for 16 @ double GetFromDatabase(Celement *Ct, int index, double &error){    //for W_Graph
9.5.5 03/06/13  decreased threshould down log to 1e-25 in 2d =25 plots
9.5.4 03/06/13  modification for dME field 15. everwhwere 16
9.5.3 03/06/13  new database (d T1/2)
9.5.2 03/06/13  "ys" time in T1/2 dbf  - yoctosecond 10^-24
9.5.1 03/06/13  for DBF-file reserve dME for dT12, help for fission_barrier