

- Update of ARIS saveset reading utility
- Hybrid model for transmission calculations with the Distribution model [[link](#)]
- Exponent mode in the Triangle convolution model (Excitation energy model #2) [[link](#)]
- dBE-systematics update [[link](#)]
- Implementation of the Beam Dump object in BD 3D-plot
- All modifications : from 17.8 to 17.9
- *Links on the previous version v.[17.8](#), [17.7](#), [17.6](#), [17.5](#), [17.3](#), [17.2](#)*

## ARIS saveset reading utility

- Sextupoles: Reading and calculation corrections applied.
- Due to changes in saveset format:
  - Updated the utility search names to match savset standards.
  - Global revision of reading functions (materials, slits, multipoles)
- Modified Table and Wedge reading functions to preserve LISE configuration original density and compound properties
- Implemented DB2 wedge for reading
- Updated ARIS saveset reading log

## eL\_ARIS\_k3cb2 configuration

- Updated eL\_ARIS\_k3cb2 for target and wedge materials and thicknesses
- Corrected the official DB2 wedge name for FS\_F2S1:VD\_D1563

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ARIS saveset reading log
Save As Print PrintView Consolas
C:/Users/taras/OneDrive/LISEcute/LISE_requests/2024/11-08_Shane_sextupoles/2024_1
beam: 48Ca
target: C (5 mm)
PS wedge D1184: Al539Zn25Mg25 (2.5 mm) -- do not forget to set the wedge angle
DB2 wedge D1563: Al539Zn25Mg25 (3.32 mm) -- do not forget to set the wedge angle

slitsX slits_PS_WED: -31.0 : +38.0
slitsX DB1_Slits: -10.0 : +10.0
slitsX DB2_slits: -25.0 : +25.0
slitsX DB4_Slits: -27.0 : +27.0
slitsX DB5_Slits: -35.0 : +35.0
slitsY DB5_Slits: -30.0 : +30.0

dipole 1: FSD1_SCD1 ⇔ FS_F1S1:DV_D1064: 4.601 Tm
dipole 2: FSD1_SCD2 ⇔ FS_F1S1:DV_D1108: 4.601 Tm
dipole 3: FSD1_SCD3 ⇔ FS_F1S2:DV_D1246: 4.2058 Tm
dipole 4: FSD2_SCD4 ⇔ FS_F1S2:DV_D1402: 4.2058 Tm
dipole 5: DH_D1513 ⇔ FS_F2S1:DH_D1513: 4.2058 Tm
dipole 6: DH_D1608 ⇔ FS_F2S2:DH_D1608: 3.5117 Tm
dipole 7: DH_D1712 ⇔ FS_F3S1:DH_D1712: 3.4781 Tm
dipole 8: DH_D1807 ⇔ FS_F3S2:DH_D1807: 3.476 Tm

quad 1: WIQ1 ⇔ FS_F1S1:Q_D1013: +6.460 kG
quad 2: WIQ2 ⇔ FS_F1S1:Q_D1024: -10.173 kG
quad 3: WIQ3 ⇔ FS_F1S1:Q_D1035: +6.583 kG
quad 4: WIQ4 ⇔ FS_F1S1:Q_D1137: +8.654 kG
quad 5: WIQ5 ⇔ FS_F1S1:Q_D1148: -10.846 kG
quad 6: WIQ7 ⇔ FS_F1S1:Q_D1170: +5.752 kG
quad 7: CIQT1A ⇔ FS_F1S2:Q_D1195: +11.469 kG
quad 8: CIQT1B ⇔ FS_F1S2:Q_D1207: -11.667 kG
quad 9: CIQT1C ⇔ FS_F1S2:Q_D1218: +8.137 kG
quad 10: CIQT2A ⇔ FS_F1S2:Q_D1288: +1.747 kG
quad 11: CIQT2B ⇔ FS_F1S2:Q_D1299: -5.592 kG
quad 12: CIQT2C ⇔ FS_F1S2:Q_D1311: +4.265 kG
quad 13: CIQT3A ⇔ FS_F1S2:Q_D1338: +1.980 kG
quad 14: CIQT3B ⇔ FS_F1S2:Q_D1349: -4.308 kG
quad 15: CIQT3C ⇔ FS_F1S2:Q_D1361: +3.004 kG
quad 16: CIQT4A ⇔ FS_F1S2:Q_D1430: +3.008 kG
quad 17: CIQT4B ⇔ FS_F1S2:Q_D1441: -6.677 kG
quad 18: CIQT4C ⇔ FS_F1S2:Q_D1453: +3.452 kG
quad 19: Q_D1476 ⇔ FS_F2S1:Q_D1476: +11.036 kG
quad 20: Q_D1484 ⇔ FS_F2S1:Q_D1484: -13.625 kG
    
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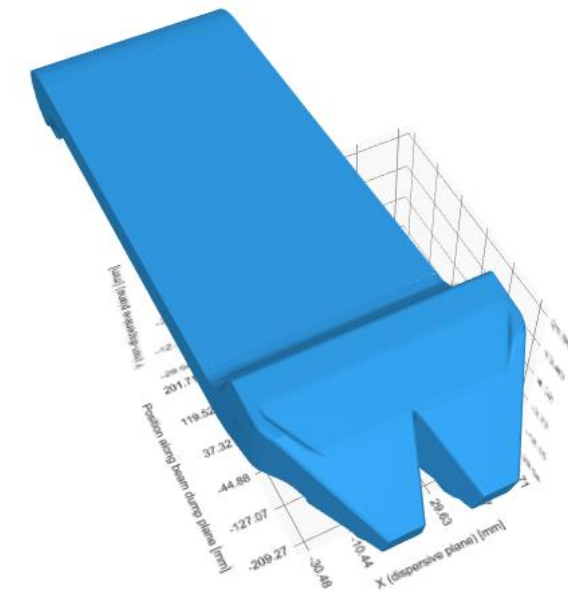
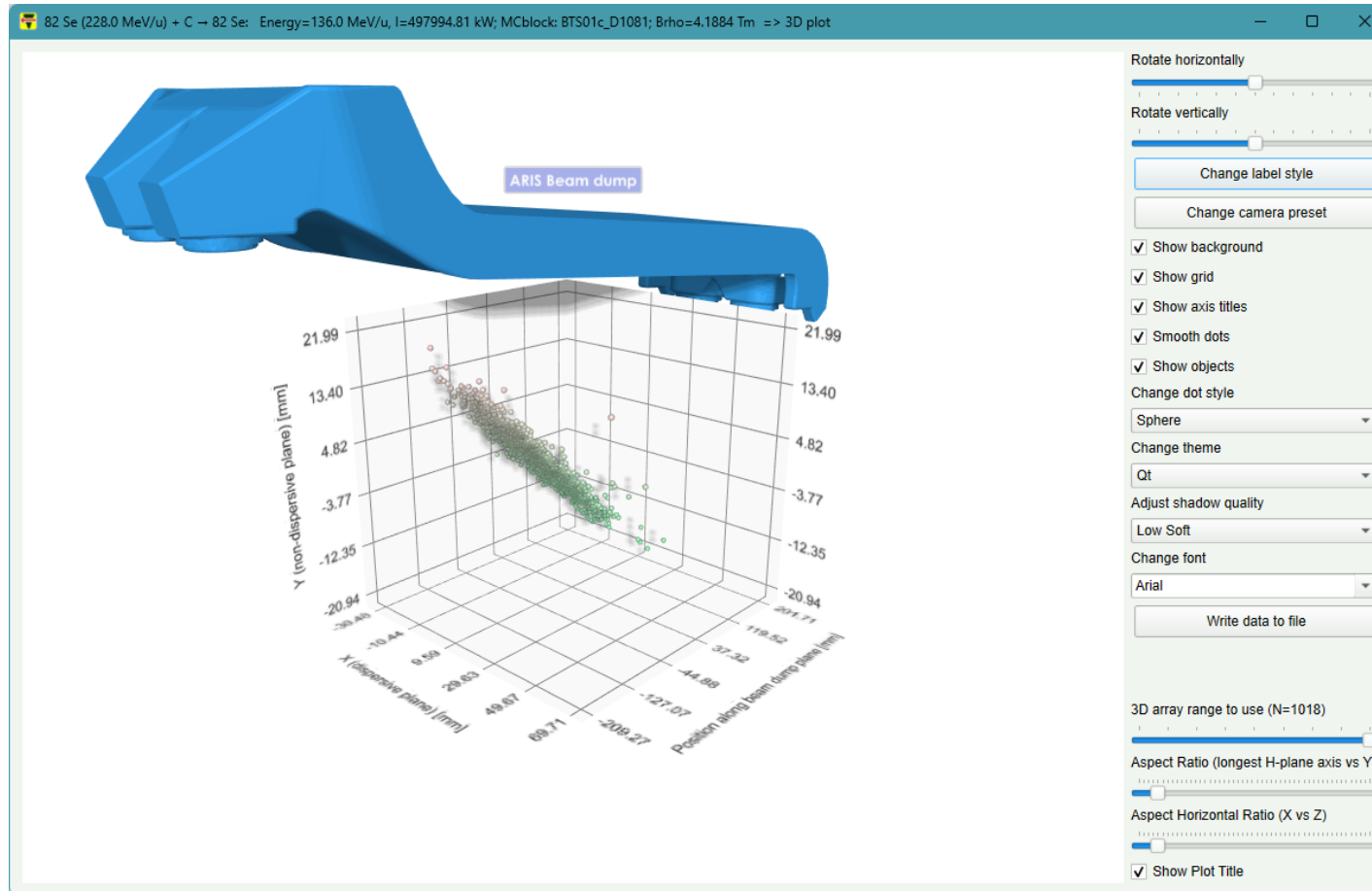
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ARIS saveset reading log
Save As Print PrintView Consolas
quad 21: Q_D1492 ⇔ FS_F2S1:Q_D1492: +14.608 kG
quad 22: Q_D1538 ⇔ FS_F2S1:Q_D1538: +8.563 kG
quad 23: Q_D1545 ⇔ FS_F2S1:Q_D1545: -11.014 kG
quad 24: Q_D1553 ⇔ FS_F2S1:Q_D1553: +13.635 kG
quad 25: Q_D1573 ⇔ FS_F2S2:Q_D1573: +11.679 kG
quad 26: Q_D1580 ⇔ FS_F2S2:Q_D1580: -8.556 kG
quad 27: Q_D1588 ⇔ FS_F2S2:Q_D1588: +5.508 kG
quad 28: Q_D1629 ⇔ FS_F2S2:Q_D1629: +4.827 kG
quad 29: Q_D1639 ⇔ FS_F2S2:Q_D1639: -9.676 kG
quad 30: Q_D1646 ⇔ FS_F2S2:Q_D1646: +11.744 kG
quad 31: Q_D1674 ⇔ FS_F3S1:Q_D1674: +12.399 kG
quad 32: Q_D1682 ⇔ FS_F3S1:Q_D1682: -9.613 kG
quad 33: Q_D1691 ⇔ FS_F3S1:Q_D1691: +4.785 kG
quad 34: Q_D1733 ⇔ FS_F3S1:Q_D1733: +5.376 kG
quad 35: Q_D1740 ⇔ FS_F3S1:Q_D1740: -8.391 kG
quad 36: Q_D1748 ⇔ FS_F3S1:Q_D1748: +9.572 kG
quad 37: Q_D1767 ⇔ FS_F3S2:Q_D1767: +9.369 kG
quad 38: Q_D1775 ⇔ FS_F3S2:Q_D1775: -9.065 kG
quad 39: Q_D1783 ⇔ FS_F3S2:Q_D1783: +7.080 kG
quad 40: Q_D1827 ⇔ FS_F3S2:Q_D1827: +12.180 kG
quad 41: Q_D1835 ⇔ FS_F3S2:Q_D1835: -11.197 kG
quad 42: Q_D1843 ⇔ FS_F3S2:Q_D1843: +9.113 kG

sext 1: D1013 has not been found or bad format!!!
sext 2: WIQ2 ⇔ FS_F1S1:Q_D1024: +0.153 kG
sext 3: WIQ3 ⇔ FS_F1S1:Q_D1035: +0.345 kG
sext 4: WIQ4 ⇔ FS_F1S1:Q_D1137: +1.330 kG
sext 6: WIQ7 ⇔ FS_F1S1:Q_D1170: +0.288 kG
sext 7: CIQT1A ⇔ FS_F1S2:Q_D1195: +0.587 kG
sext 8: CIQT1B ⇔ FS_F1S2:Q_D1207: -0.482 kG
sext 9: CIQT1C ⇔ FS_F1S2:Q_D1218: +0.439 kG
sext 10: CIQT2A ⇔ FS_F1S2:Q_D1288: +0.403 kG
sext 11: CIQT2B ⇔ FS_F1S2:Q_D1299: -0.310 kG
sext 13: CIQT3A ⇔ FS_F1S2:Q_D1338: -0.017 kG
sext 14: CIQT3B ⇔ FS_F1S2:Q_D1349: -0.030 kG
sext 15: CIQT3C ⇔ FS_F1S2:Q_D1361: -0.068 kG
sext 16: CIQT4A ⇔ FS_F1S2:Q_D1430: -0.100 kG
sext 17: CIQT4B ⇔ FS_F1S2:Q_D1441: +0.135 kG
sext 18: CIQT4C ⇔ FS_F1S2:Q_D1453: -0.007 kG
sext 20: D1484 has not been found or bad format!!!
sext 21: D1492 has not been found or bad format!!!
sext 28: D1629 has not been found or bad format!!!
sext 29: D1639 has not been found or bad format!!!
sext 32: D1682 has not been found or bad format!!!
sext 33: D1691 has not been found or bad format!!!
sext 40: D1827 has not been found or bad format!!!
    
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Re-alignment (position and rotation) is still under construction

Sasha's project



17.8.1	09/25/24	class distribution: fill_Decay()
17.8.2	09/25/24	AA ExcitEnergy -- HoleDepth Model - ExponentOption
17.8.3	09/25/24	AA ExcitEnergy diaog update for HoleDepth Model
17.8.4	09/26/24	d_Apf_excitation : revision of saved values: from CmOK --> CmCancel
17.8.5	09/26/24	All ExcitationEnergy models : no more CheckThermalization flag
17.8.6	09/27/24	moving from lise.nslc.msu.edu to lise.frib.msu.edu
17.8.7	09/28/24	new struct DistrStat () in L_StatisticsClass.h
17.8.8	09/28/24	using struct DistrStat () in Distribution classes
17.8.9	09/28/24	using struct DistrStat () in FireBall
17.8.10	09/28/24	update of ApplyLimitingTemperature functions
17.8.11	09/28/24	AA: thermolization is temporary disabled
17.8.12	09/28/24	AA: Apf Ex : Mean,Mode plots E*/dA
17.8.13	09/30/24	Gaimard distribution: exponent --> using Tmean for large dA
17.8.14	09/30/24	Correction in d_Apf_excitation_plot, d_Apf_excitation, c_ConfigPP1.h
17.8.15	09/30/24	Fragmentation mechanism : hide "Pfaff p,n" if Pffaf is not check in
17.8.16	09/30/24	x-peak --> x_mode
17.8.17	09/30/24	NPevap default is 64
17.8.18	10/15/24	Beam Dump statistics update for dBrho and Charge% (MH)
17.8.19	10/21/24	Hybrid distributions (gaussian+exponent) including asymmetric option
17.8.20	10/21/24	using Hybrid distributions in L_Trans_optics [1], using Hybrid distributions in L_Trans - c_rendmom [2]
17.8.21	10/21/24	Hybrid info in init_opt and config
17.8.22	10/22/24	d_Options : Hybrid model settings
17.8.23	11/03/24	playing with dBE
17.8.24	11/03/24	default UserCS mode for systematics and CS
17.8.25	11/04/24	BeamDump 3D - object insert
17.8.26	11/04/24	BeamDump 3D - utility update (Show,Slider,unque_pointer)
17.8.27	11/04/24	Working on dBE-systematics (implementation of t, coef and so on)
17.8.28	11/05/24	update TPlotCS2_Systematics and Qg classes
17.8.29	11/06/24	new typedef s_dBE for dBE_settings
17.8.30	11/06/24	new dialog d_dBE_settings
17.8.31	11/07/24	update of W_Graph_Qg, o_mass
17.8.32	11/07/24	revision of s_dBE
17.8.33	11/08/24	link <a href="https://lise.frib.msu.edu/17/17_3D-links.pdf">https://lise.frib.msu.edu/17/17_3D-links.pdf</a> on 3D in MC dialog, link 15/15_9_1_UserWedge.pdf in TProfileCustomDlg::CmLoadTXhelp(), link 17_08_30_dBE.pdf on dBE_settings dialog
17.8.34	11/08/24	color button in Curved profile dialog
17.8.35	11/08/24	hybrid model help link
17.8.36-38	11/08-10/24	ARIS saveset reading utility revision
17.8.39	11/10/24	correction in exponent mode of ExE#2, documentation for ExEnergy#2