First K2 simulation with graphite jaws

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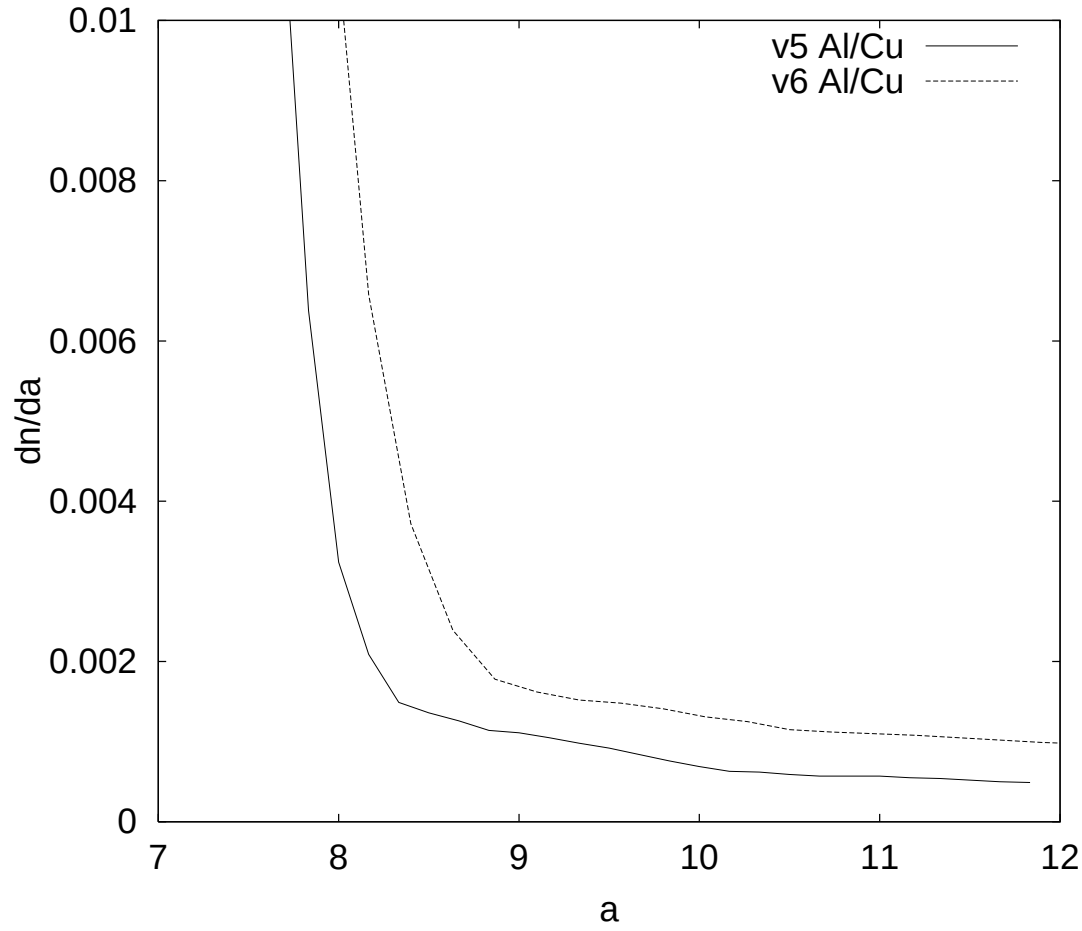
/Text/LHC/2002/coll_dec/c2.tex

Input material

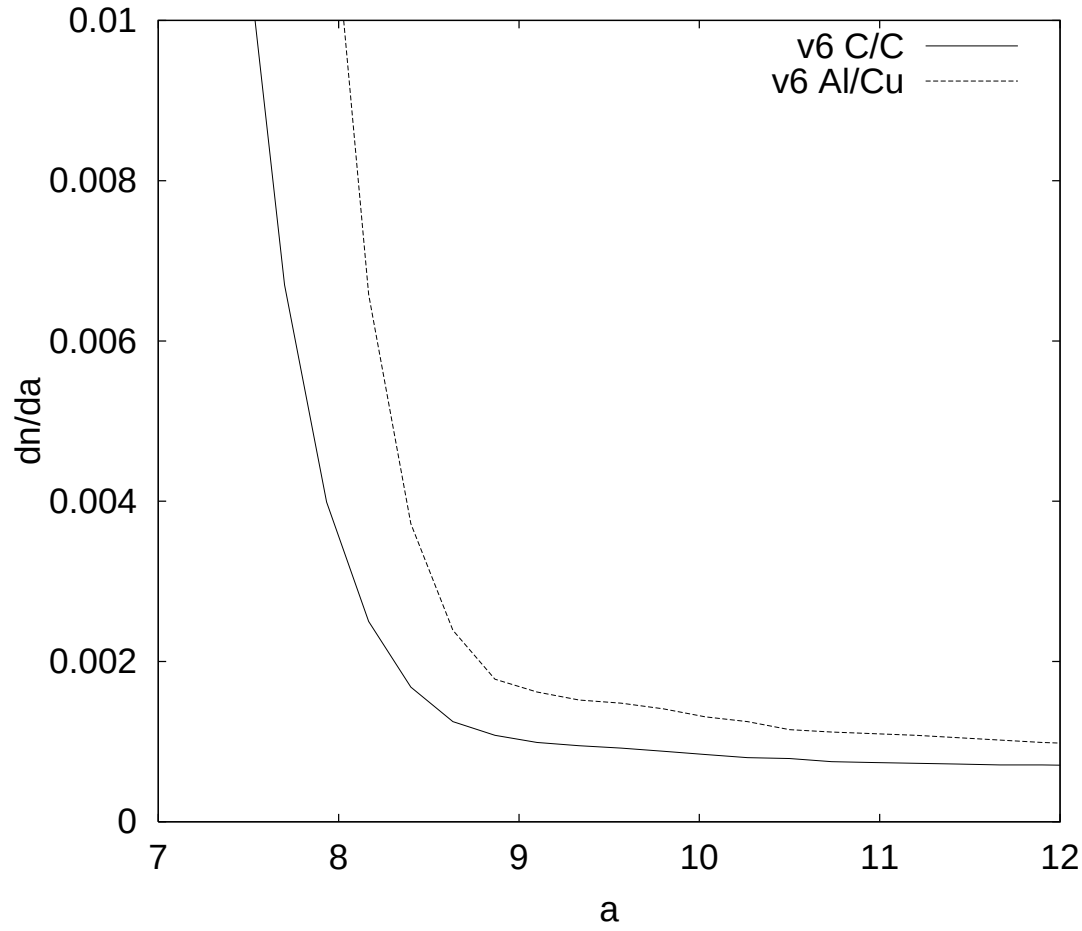
- IR7, optics V6.4 (thanks to Dobrin and Thys)
- jaw lengths : prim : 0.2m , sec : 0.5m
- Gaphite jaws $\rho = 4.52$ g/cm^3 (twice the standard value) to avoid changing the layout
- Jaw location and skew as optimised for V6.2 (see below)
- $n_1 = 6.0$, $n_2 = 7.0$ (distance to beam adjusted correctly)
- 100k runs made for V5 Al/Cu , V6.4 Al/Cu , V6.4 C2/C2

Efficiency V5/V6 Al/Cu



Comment: V6.2 jaw settings with V6.4 makes the difference

Efficiency V6 Al/Cu vs. C2/C2



Comment: C2/C2 30% better

Conclusions

- K2 works under Linux , finally
- Several files , under final shaping, for Markus at hand
- With graphite , .4 / 1m long jaws, collimation efficiency is equal/better then with former Al/Cu .2 / .5m
- A factor 2 in efficiency was lost between V6.2 and V6.4 (jaw location/skew no readjusted as of today for V6.4)