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
- Graphite jaws $\rho = 4.52 \text{ g/cm}^3$ (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
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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 than 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)