

Rubidium Program Comments

The program calculates rubidium NMR spectra in $\text{Rb}_{1-x}\text{K}_x\text{Fe}(\text{MoO}_4)_2$ for magnetic structures discussed in the paper <https://doi.org/10.1103/PhysRevB.99.024419>. The following screenshots show parameter sets used in our final calculations (Fig. 6 of the paper). If desired, you can try using other parameter sets to check. The value of the contact field 0.49 arb. units corresponds to 2.5 mT/ μB stated in the paper. $\theta = 90^\circ$ sets the field $\mathbf{H} \perp \mathbf{C}^3$, for this field direction the spectral shape does not depend on the value of φ .

Fig.6. (a) 3D *uuu* with periodicity 2c or 3c in the \mathbf{C}^3 direction, $\mu = 5 \mu\text{B}$, individual linewidth $\delta = 20 \text{ mT}$.

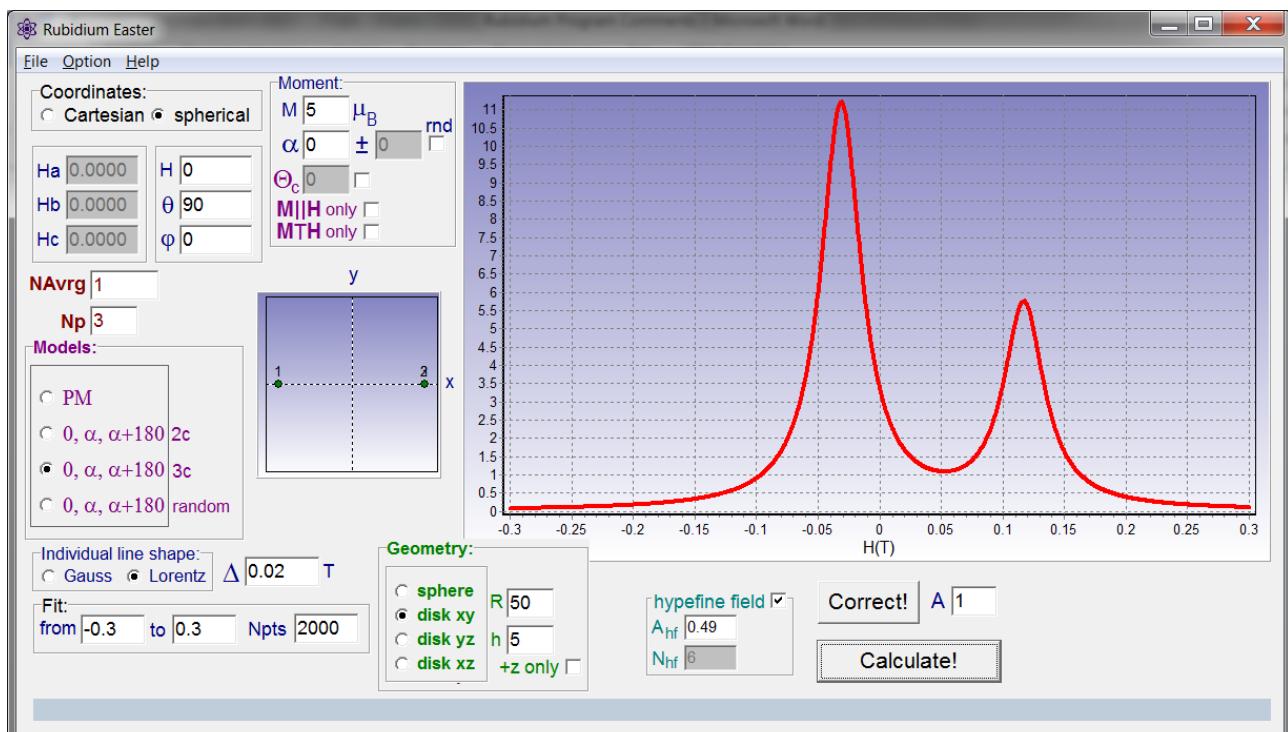
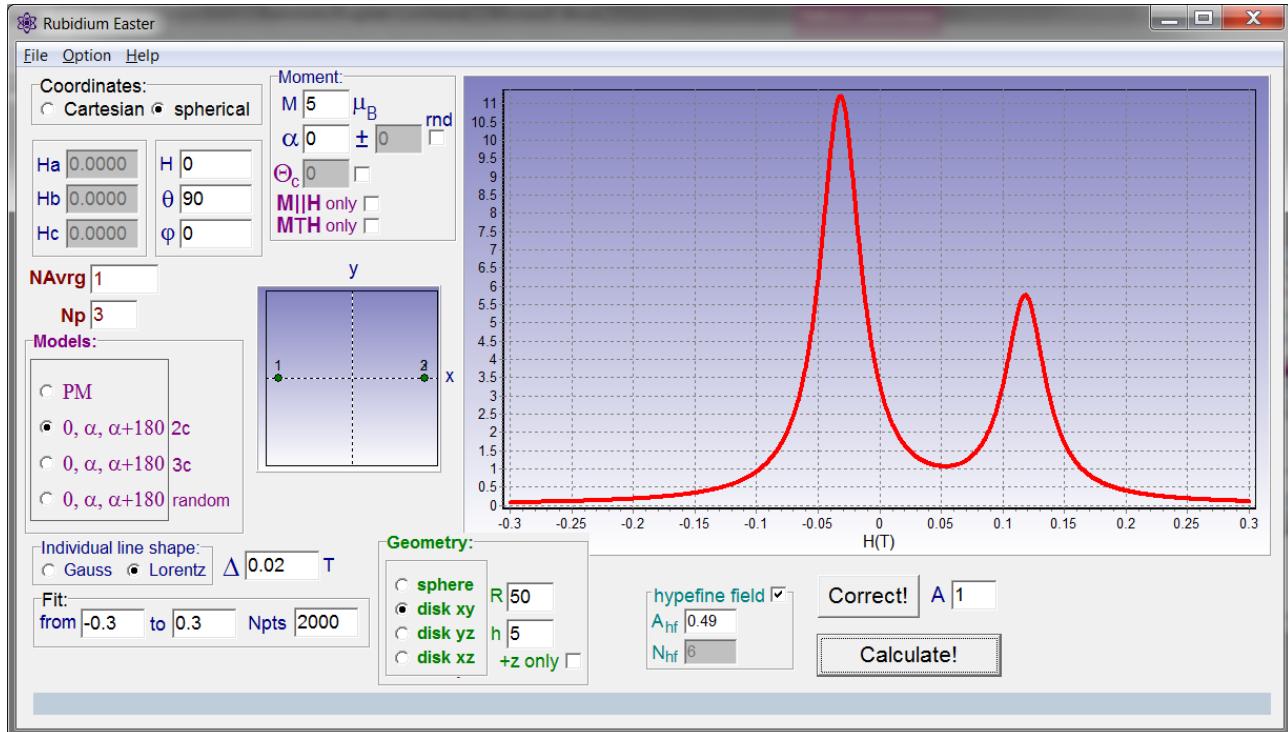


Fig.6. (b) 3D fan with periodicity 2c or 3c in the C^3 direction, $\mu = 5 \mu\text{B}$, $\delta = 20 \text{ mT}$.

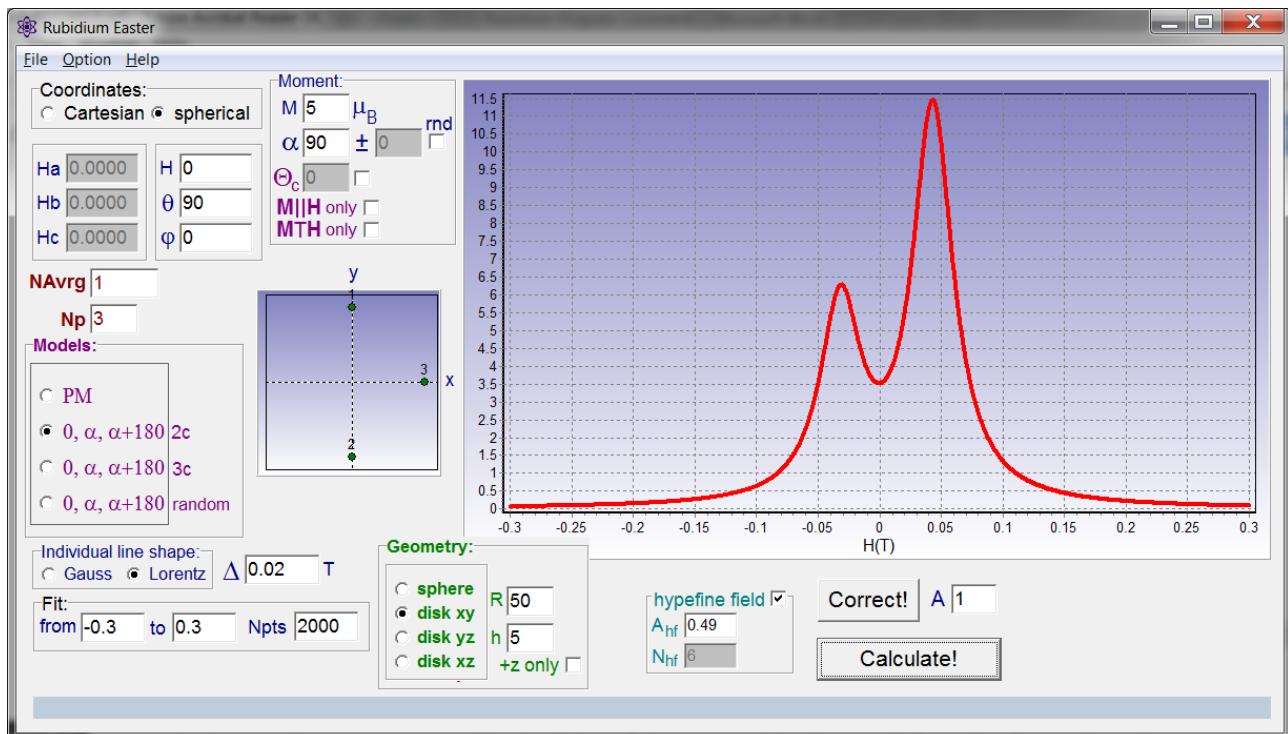
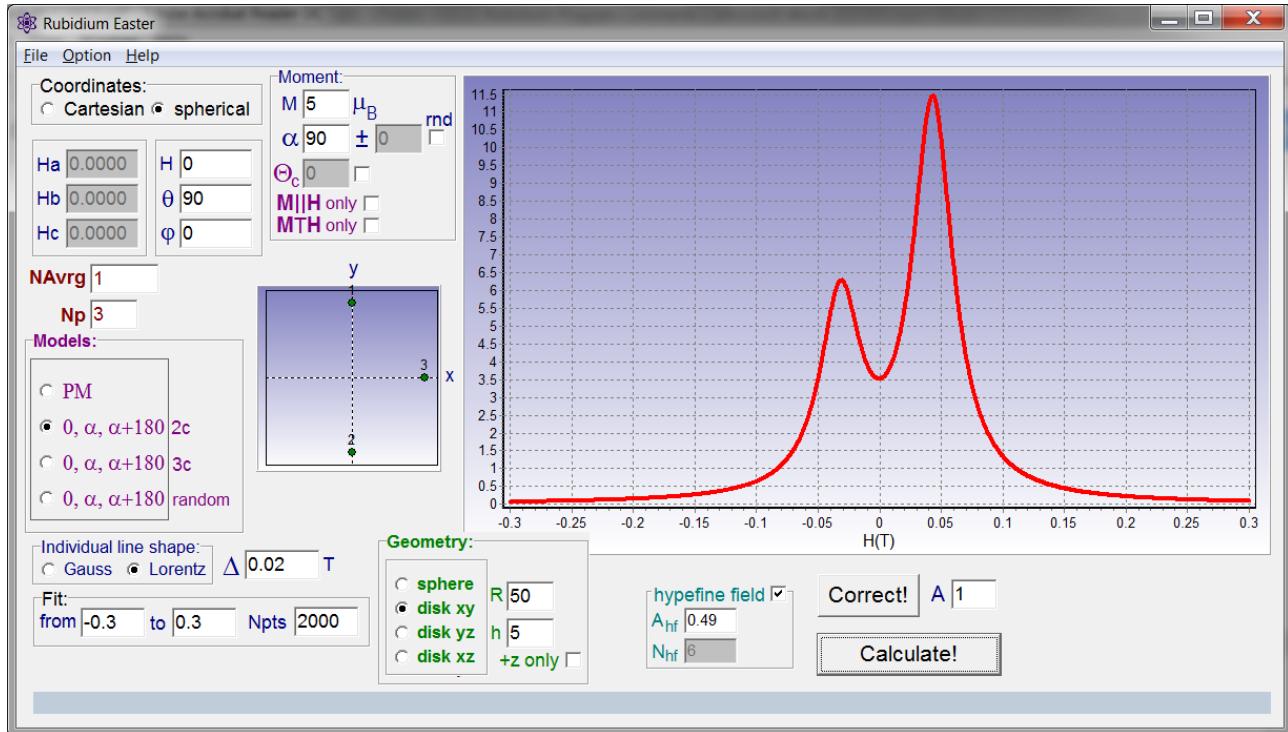


Fig.6. (c) 2D uud , $\mu = 5 \text{ } \mu\text{B}$, $\delta = 20 \text{ mT}$.

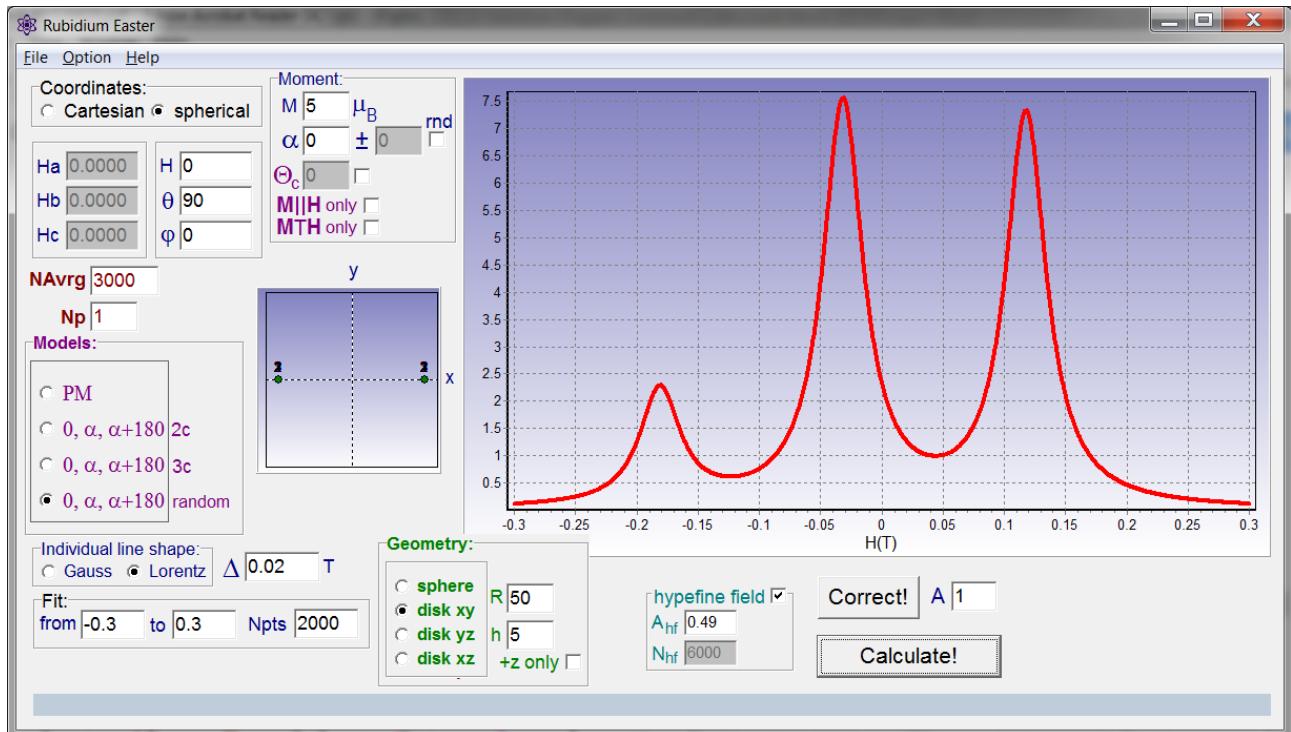
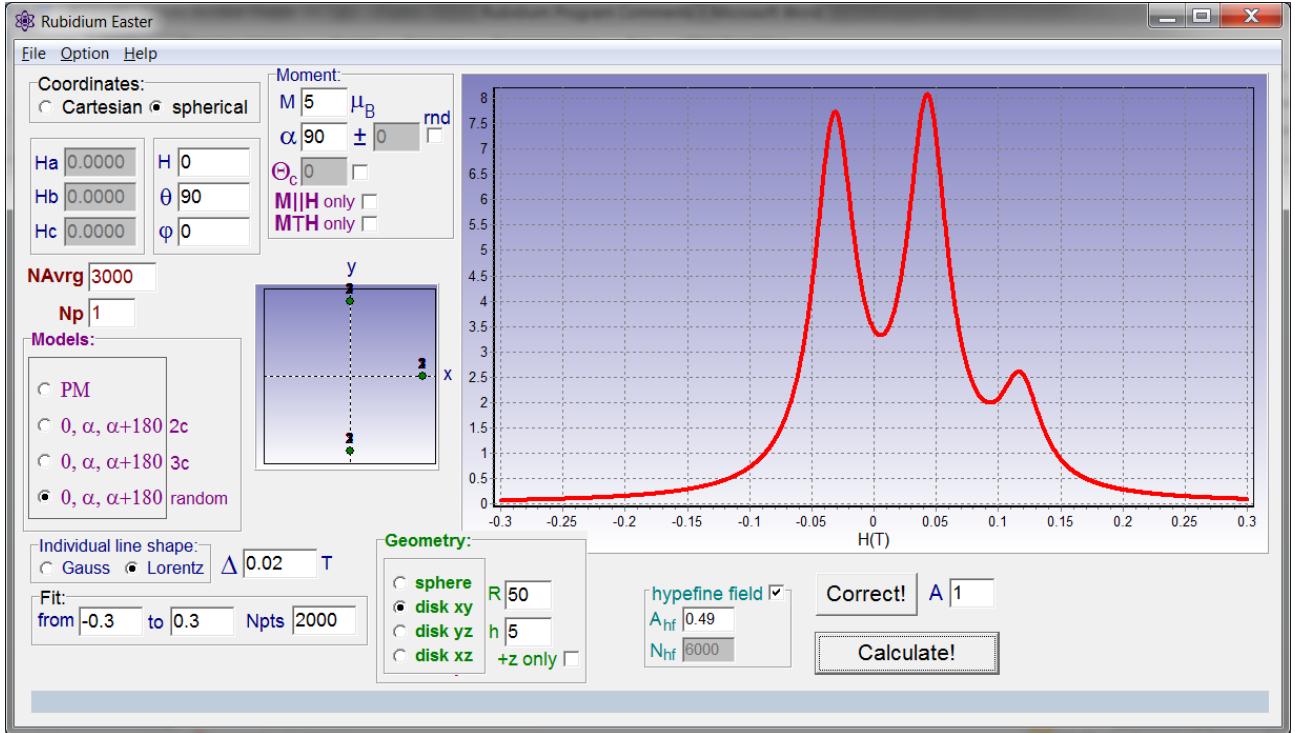
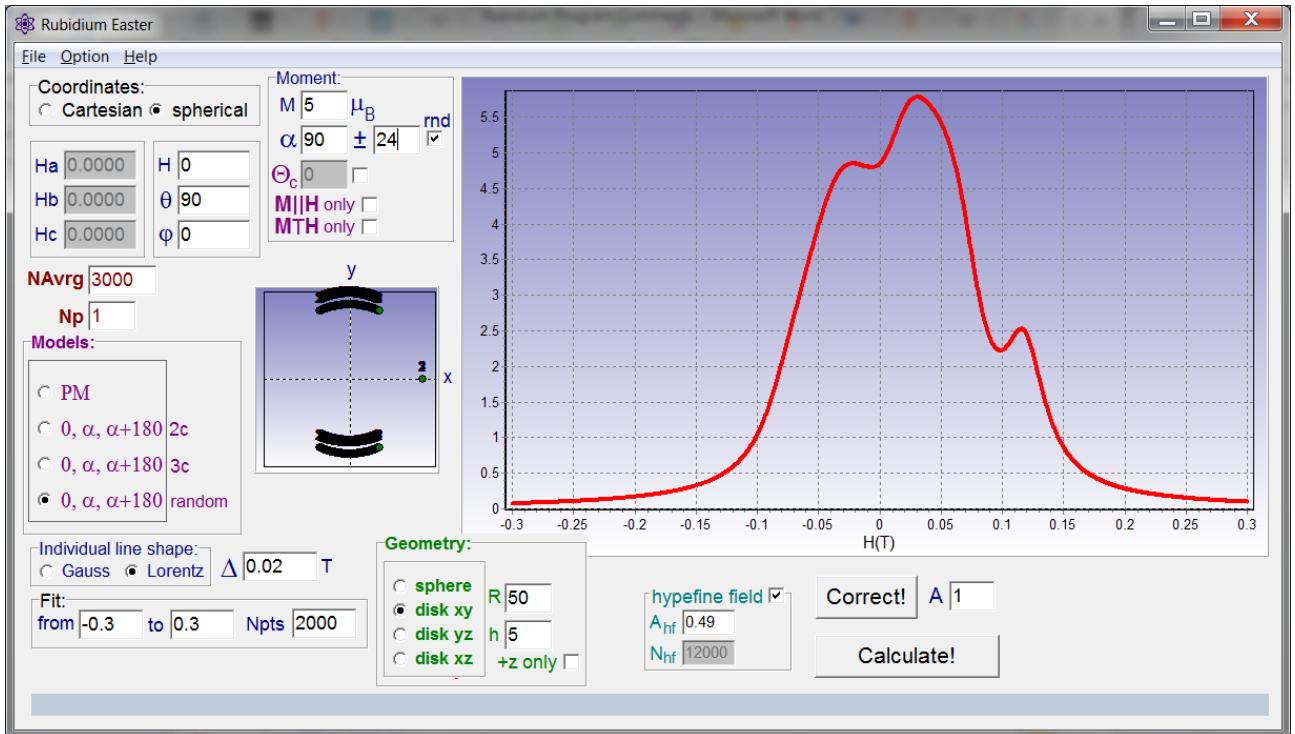


Fig. 6. (d) 2D fan, $\mu = 5 \mu\text{B}$, $\alpha = 90^\circ$, $\delta = 20 \text{ mT}$,



2D fan, $\mu = 5 \mu\text{B}$, $\alpha = 90^\circ \pm 24^\circ$, $\delta = 20 \text{ mT}$.



Questions, suggestions and bug reports are welcomed!

Yuriy Sakhratov, Leonid Svistov
sakhratov@gmail.com