

The code is tested with Python 3.7.5, downloaded from:

<https://www.anaconda.com/download/#windows>

- Fig1 (on the left hand side) shows the orientation of the dipoles in the continuous ground state. The slider  $\tau$  varies that state.

Additionally, the magnetic induction is shown on a plane or spherical surface, precisely the field component perpendicular to that surface. The transparency of both surfaces is determined by the slider  $\alpha$ .

Sphere: Its spatial resolution of the can be adjusted with two buttons “<” and “>” within the range 10 to 360, which has to be chosen as a compromise between the artistic impression and the speed of the calculation.

Surface: It is chosen perpendicular to the grey arrow shown inside the cube. Its direction is changed with the four sliders in the lower middle part.

- Fig2: The three field components along the direction indicated by the grey arrow is presented either on a linear or a loglog-scale.
- The Figs. 3-7 show aspects of the magnetic field within the plane perpendicular to that direction, at a finite distance  $d_p$  determined by the slider.