

## Running an animation

In the graphical user interface of the animation program, different buttons and text boxes allow setting of the following parameters:

- the frequency of the applied sound (a number corresponding to the order number in the frequency array is requested, and the frequency in kHz is later shown in the animation title bar)
- the number of time steps in the animation
- the viewing direction, specified by its azimuth and elevation angles
- the display of instantaneous rotation axes for the malleus and/or incus (check box for 'yes')
- the display of the R0 ellipses for the malleus and/or incus (check box for 'yes')
- the number of frames per second for the animation
- the number of cycles for which the animation will be repeatedly shown
- next to the Start button, the possibility is offered of writing the animation to an AVI file in the directory where the program is stored (check box for 'yes')

After pushing the Start button, the program first calculates the position of the malleus and incus for each time step in the cycle. When this is completed the motion animation starts. Note that the stapes motion could not be measured with the experimental approach used and that the rest positions of the 3 ossicles are shown in grey.

It is currently necessary to restart the program and re-enter all parameter values when a repeated run of the animation or a new animation is wanted.