

# Exercise 3g: Series

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Build a beamline containing 2 choppers running with the source frequency in distances of 6 and 26 m from the source and a guide between the choppers.

Simulate 5 settings with chopper phases to let neutrons of 1, 2, 4, 6 and 9 Å pass.  
Monitor the wavelength and TOF distribution after the second chopper for each setting.

Source parameters:

- ISIS TS1 water moderator
- 50 Hz

Guide parameters:

- constant cross-section of 30x60 mm<sup>2</sup> (WxH)
- Ni coating
- no waviness
- no loss by junctions

Disc chopper parameters:

- 350 mm radius
- 18° and 78° aperture
- proper height and position of the aperture