Importing neutron diffraction data into MTEX

- 1. Install latest version of MTEX
- 2. Open MATLAB and activate MTEX by typing 'startup_mtex'
- 3. Click the link that says 'Import pole figure data'
- Click the '+' button and locate and import all text files containing Q ('quartz') using the Import Wizard. All files are named after their phase and Miller index. For example, 'd2_part2_p1_Q(102).txt' refers to (102) diffraction data for quartz. Once all quartz files have been selected click 'Next'
- 5. In the Polefigure Generic Interface window that follows...
 - Change Angle Convention to 'Spherical'
 - Change Column 1 to 'Latitude'
 - Change Column 2 to 'Longitude'
 - Change Column 3 to 'Intensity'
 - Click 'Finish'

-	mport Wizard	_		\times
---	--------------	---	--	----------

PoleFigure Generic Interface

Select Data Format

	Latitude	Longitude	Intensity		
1	0	NaN	NaN		
2	0	2.7000	233.7731		
3	0	5.7000	102.5166		
4	0	8.7000	98.1975		
5	0	11.7000	539.1090		
6	0	14.7000	68.2363		
7	0	17.7000	179.3107		
8	0	20.7000	93.6595		
9	0	23.7000	207.3326		
10	0	26.7000	83.6513		
11	0	29.7000	167.2254		
12	0	32.7000	989.9060		
13	0	35.7000	60.2570		
14	0	38.7000	60.7169		
15	0	41.7000	103.5563		
16	0	44.7000	337.9762		
17	0	47.7000	264.2651		
The	data format could i ise specify how the	not be detected au columns should	utomatically. be interpreted!	Show	Header
Piea					
Piea	Column1	Column2	Column3		
Piea 1 Li	Column1 atitude	Column2 ngitude Inte	Column3		
1 La	Column1 atitude Lo	Column2 ngitude Inte	Column3		
1 La	Column1 atitude Lo	Column2 ngitude Inte	Column3 ensity		
1 La	Column1 atitude Lo gle Convention oherical (Latitude, L	Column2 ngitude Inte ongitute) ~	Column3 ensity Degree V		
1 La	Column1 atitude Lo gle Convention oherical (Latitude, L	Column2 ngitude Inte ongitute) ~	Column3 ensity Degree v		

 Click 'Finish' in the Import Wizard window. MTEX will generate an appropriate script for importing and running the data. To learn how to visualise the data, please visit: <u>https://mtex-toolbox.github.io/</u>