

#### Use case : single Gaussian fit in Spectrum Analysis (SA)

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First load your data : click on the icon  $\square$  or go to the "Models" menu  $\rightarrow$  Spectrum Analysis

00	Spectrum A	Analysis 1		
Data Visr d	ata: 0.0 km/s 💌 in : REST 💌 Te	elescone 777	Load config	
Tuning Opens a file brow	/ser to select a data f	ìle	Display	
			Save config	
		1		
00	Spectrum A	Analysis 1		
Data		In this case, CASSIS did	not find	
Load Ili/cassis-data/iram.bas Visr d	ata: 3.8 km/s 🔻 in : REST 🔫 Te	elescope ??? the telescope ; click on t	the buttor	
Tuning		to open a file browser to	o select a	
Range min: 79.9948749 max: 281.0048	74 GHz	telescope file if desired		
Automatically filled in by CASSIS but can be restricted by the user				
	Ļ	1		
00	Spectrum A	Analysis 1		
Data Load Illi/cassis-data/iram.bas VIsr da	ata: 3.8 km/s 💌 in : REST 💌 Te	elescope iram_ABCD	Load config	
Tuning Range min: 79.9948749 max: 281.00483	74 GHz 👻		Display Save config	

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Search for a line to fit (zoom with the mouse or with the "X Tools" tab) :









Warning: if we proceed with fitting one of the lines, CASSIS will calculate the fitted function over the entire range of the "Tuning" section (SA data loading window), not just on the part that we have zoomed in. In this example, we loaded a spectrum with a large number of points, such that the fitting would take a long time. It is therefore important to restrict the tuning range once you have explored the spectrum.

	⊖ ○ ○ Spectrum Analysis 1		
		Load config	
	Load Hill/cassis-data/iram.bas Visr data: 3.8 km/s Vin: Rest Vierback		
_		Display	
		Save config	

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Go to the "Fit" tab and click on "Manage Components"  $\rightarrow$  Add Line  $\rightarrow$  Gaussian













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