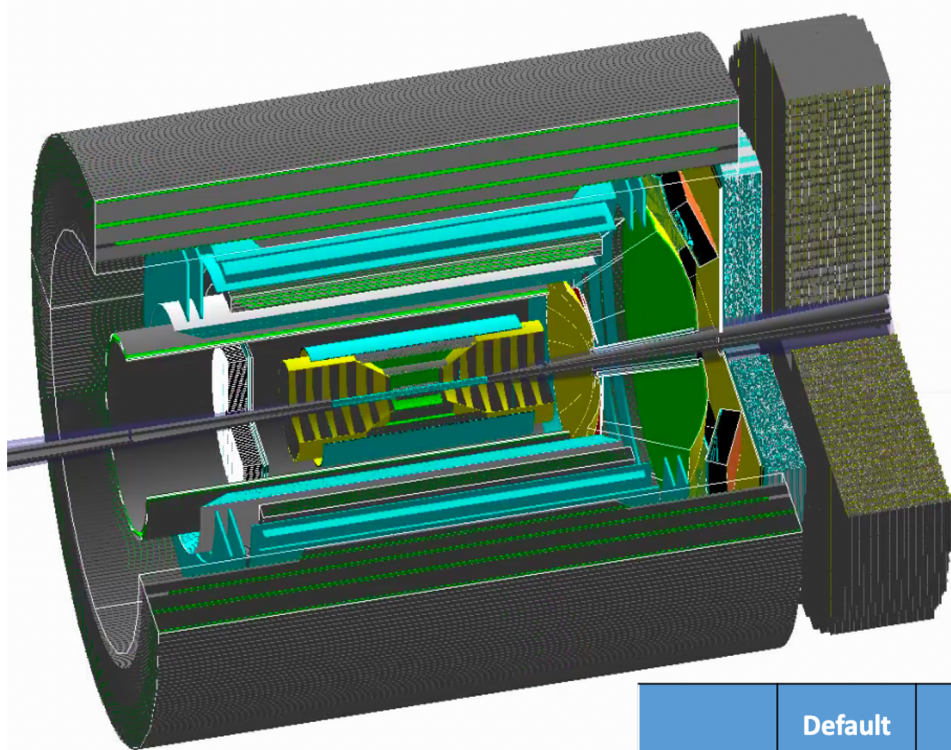


# Status of LGADs TOF simulations

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Detailed studies done for  $B = 1.5T$  (eRD29): [link](#)

Implemented a configuration with  $B = 3T$  map in Fun4All

- Time resolution: 20 ps / layer
- Granularity/Pitch size: 500-800 microns (being optimized)

Plan for performance studies with  $B=3T$  for ATHENA to be discussed (new framework?)

	Default	$R_{\text{barrel}}$	Length	z location	$R_{\text{endcap,in}}$	$R_{\text{endcap,out}}$	$\eta$ coverage	Area (m <sup>2</sup> )
Backward	ETTL <sub>0</sub>			-1.555	0.077	0.632	[-3.7,-1.6]	1.23
	ETTL <sub>1</sub>			-1.585	0.078	0.62	[-3.7,-1.6]	1.19
Central	CTTL <sub>0</sub>	0.5	2				[-1.6,1.3]	6.28
Forward	FTTL <sub>0</sub>			2.87	0.116	1.527	[1.3,3.9]	7.28
	FTTL <sub>1</sub>			2.89	0.117	1.538	[1.3,3.9]	7.39
Total area								23.37