

Phase	Project	Physics	Xe weight	detector	readout	year	location	collaboration
1	EXO	double beta	10ton (3m <sup>3</sup> )	TPC	x, y anode wires ; APD for lights , laser - ID	for 10 years	WIPP, NM, USA	Enriched Xenon Observatory, US(SLAC), Canada, Swiss, Russia
			1ton			for 5 years		
			200kg			Nov., 2006		
1	XMASS	DM solar $\nu$ double beta	20ton	lights	PMT		Kamioka	Japan, Korea, Russia
			1ton (800kg)					
			100kg (30 l)			2006		
1	MEG	$\mu \rightarrow e \gamma$	800 - 900 l	lights	PMT	Nov., 2006	PSI	Japan, Italy, Switzerland, Russia, USA
			70 l			2003		
1	LXe-GRIT	cosmic $\gamma$	2.4 l	TPC	x, y anode wires ; PMT for lights	1997, 1999, 2000	NSBF (National Science Balloon Facility),NM, USA	Columbia university
1	LXe-PET	PET	64.8 l	TPC	segmented pads	proposal	Nantes Cyclotron	France
1	PETYA	PET		drift chamber	anode wires or mini-strip ; PMT, APD for lights	2002 (prototype)	Univ. of Coimbra	Portugal
1	TOF-PET	PET	77.8 l	lights	PMT		Waseda univ., NIRS	Japan
			12 l			2003		