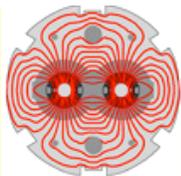


LARP

Wrapping it Up

- Space-charge studies up and running.
- e-Cloud investigations up & running.
- Impedance & Instabilities & feedback starting up
 - will pick up activity as PS2 details are forthcoming, expect lots of interaction with CERN design group.
- IPM and phase-space diagnostics reconstituting itself.
- Laser stripping for H⁻ injection has high synergy with LBNL-SNS collaboration and with Project X. This would be a very interesting R&D project that likely requires LARP support to go ahead (in a PS2 context).

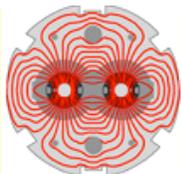


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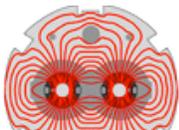
The Plan

- The results of the PS2 activities should directly contribute to the PS2 Design Report. (End CY2010 or CY2011??)
- The PS2 work has a natural decision point when the PS2 design report is written:
 - Continue, maybe proceed to prototypes
 - or terminate
 - At present we are incorporating beyond-design-report activities in the overall plan.
- The FY09 work is being funded by “good-will” of the labs involved.
 - \$100k LARP money being used for travel & “seed money”
- It is understood that for FY10 & beyond this situation is not tenable.
 - letter by Eric suggesting to plan for \$0.5M/y
 - I am counting on \approx matching contributions by the labs

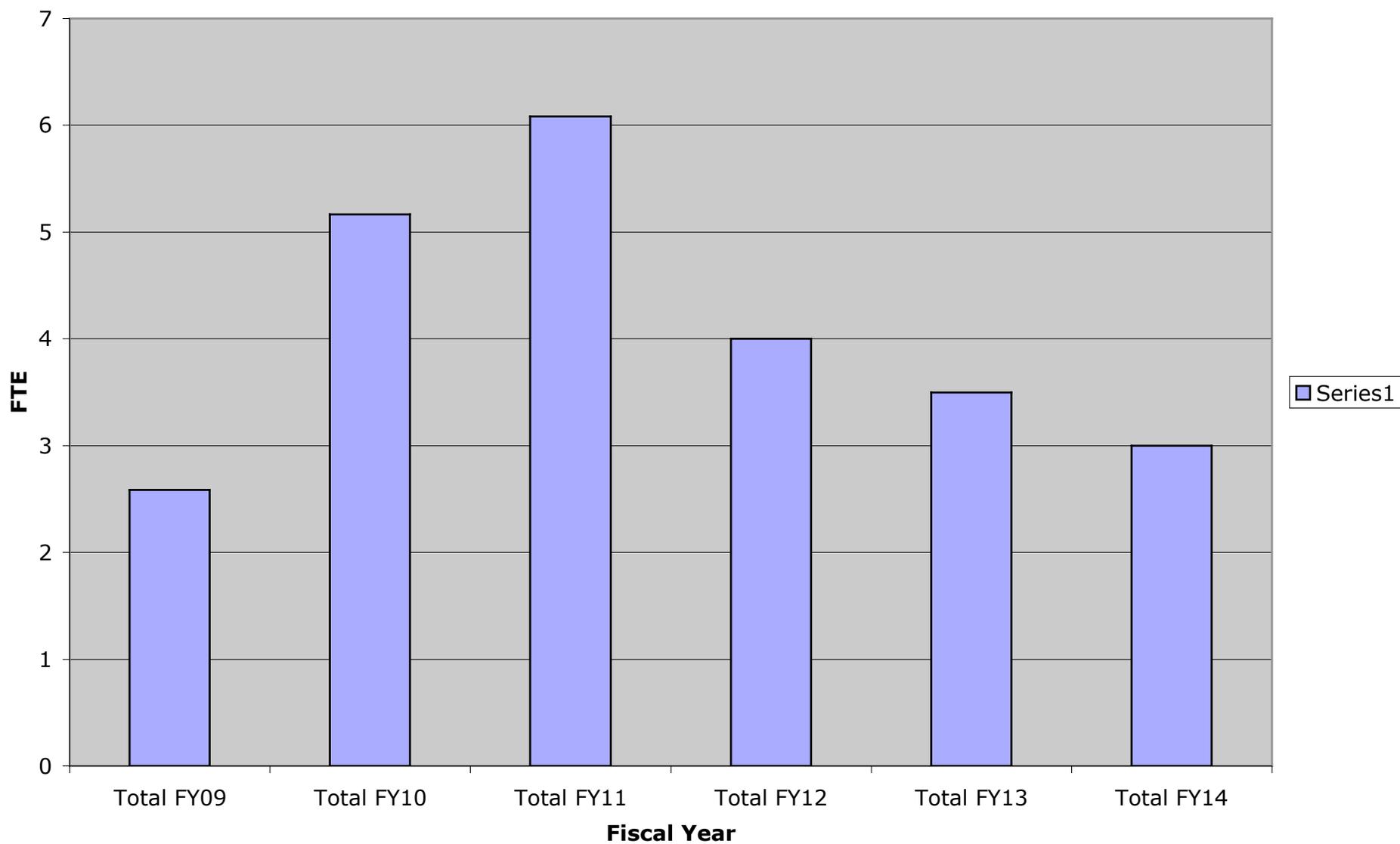
FTE tally	Updated 1-Apr-09	FY09...FY14 Summary	"Blue Sky"					
"Blue Sky" Budget Requests			Summary FY09...FY14					
Project	Lead	Lead lab	PersonYear tot	SLAC	LBNL	FNAL	BNL	Travel
H- laser stripping	R. Wilcox	LBL	1.5	0	1.5	0	0	\$ 60.00
Space-charge tracking, collim	J. Qiang/Spentzouris	LBL/FNAL	10.0	0	5	5	0	\$ 180.00
Instability	K. Bane	SLAC	5.5	3.5	2	0	0	\$ 20.00
e-cloud	M. Furman	LBL	4.1	1.5	2.58	0	0	\$ 180.00
Feedbacks	C. Rivetta	SLAC	2.0	1.5	0.5	0	0	\$ 20.00
Phase-space diagnostic & MTE	R. de Maria/K. Brown	BNL	1.3	0.25	0	0	1	\$ 90.00
Total			24.3	6.75	11.6	5	1	\$ 550
			FY09					
Project			PersonYear tot	SLAC	LBNL	FNAL	BNL	Travel
H- laser stripping			0.0		0.0			\$ -
Space-charge tracking, collim			1.0	0	0.5	0.5		\$ 30
Instability			0.5	0.5	0.0	0		\$ 10
e-cloud			1.1	0.5	0.6			\$ 30
Feedbacks			0.0	0	0.0			\$ 10
Phase-space diagnostic & MTE			0.0	0			0	\$ 5
Total FY09			2.6	1	1.1	0.5	0	\$ 85
			FY10					
Project			PersonYear tot	SLAC	LBNL	FNAL	BNL	Travel
H- laser stripping			0.0		0.0			\$ -
Space-charge tracking, collim			1.5	0	0.8	0.75		\$ 30
Instability			1.0	1	0.0	0		\$ 10
e-cloud			1.7	0.5	1.2			\$ 30
Feedbacks			0.5	0.5	0.0			\$ 10
Phase-space diagnostic & MTE			0.5	0			0.5	\$ 30
Total FY10			5.2	2	1.9	0.75	0.5	\$ 110
			FY11					
Project			PersonYear tot	SLAC	LBNL	FNAL	BNL	Travel
H- laser stripping			0.5		0.5			\$ 20
Space-charge tracking, collim			1.5	0.0	0.8	0.8		\$ 30
Instability			1.0	0.5	0.5	0.0		\$ 30
e-cloud			1.3	0.5	0.8			\$ 30
Feedbacks			1.0	0.5	0.5			\$ 30
Phase-space diagnostic & MTE			0.8	0.3			0.5	\$ 55
Total FY11			6.1	1.75	3.1	0.75	0.5	\$ 135

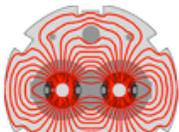


		FY12					
Project		PersonYear tot	SLAC	LBNL	FNAL	BNL	Travel
	H- laser stripping	0.5		0.5			\$ 20
	Space-charge tracking, collim	2.0	0	1.0	1		\$ 30
	Instability	1.0	0.5	0.5	0		
	e-cloud	0.0	0	0.0			\$ 30
	Feedbacks	0.5	0.5	0.0			
	Phase-space diagnostic & MTE	0.0				0	\$ -
	Total FY12	4.0	1	2.0	1	0	\$ 80
		FY13					
Project		PersonYear tot	SLAC	LBNL	FNAL	BNL	Travel
	H- laser stripping	0.5		0.5			\$ 20
	Space-charge tracking, collim	2.0	0	1.0	1		\$ 30
	Instability	1.0	0.5	0.5	0		
	e-cloud	0.0	0	0.0			\$ 30
	Feedbacks	0.0	0	0.0			
	Phase-space diagnostic & MTE	0.0				0	\$ -
	Total FY13	3.5	0.5	2.0	1	0	\$ 80
		FY14					
Project		PersonYear tot	SLAC	LBNL	FNAL	BNL	Travel
	H- laser stripping	0.0		0.0			\$ -
	Space-charge tracking, collim	2.0	0	1.0	1		\$ 30
	Instability	1.0	0.5	0.5	0		
	e-cloud	0.0	0	0.0			\$ 30
	Feedbacks	0.0	0	0.0			
	Phase-space diagnostic & MTE	0.0				0	\$ -
	Total FY14	3.0	0.5	1.5	1	0	\$ 60
Notes:	For Instabilities: added FY12...14 for potential prototype evaluation For Feedbacks: No effort FY09 due to lack of input						

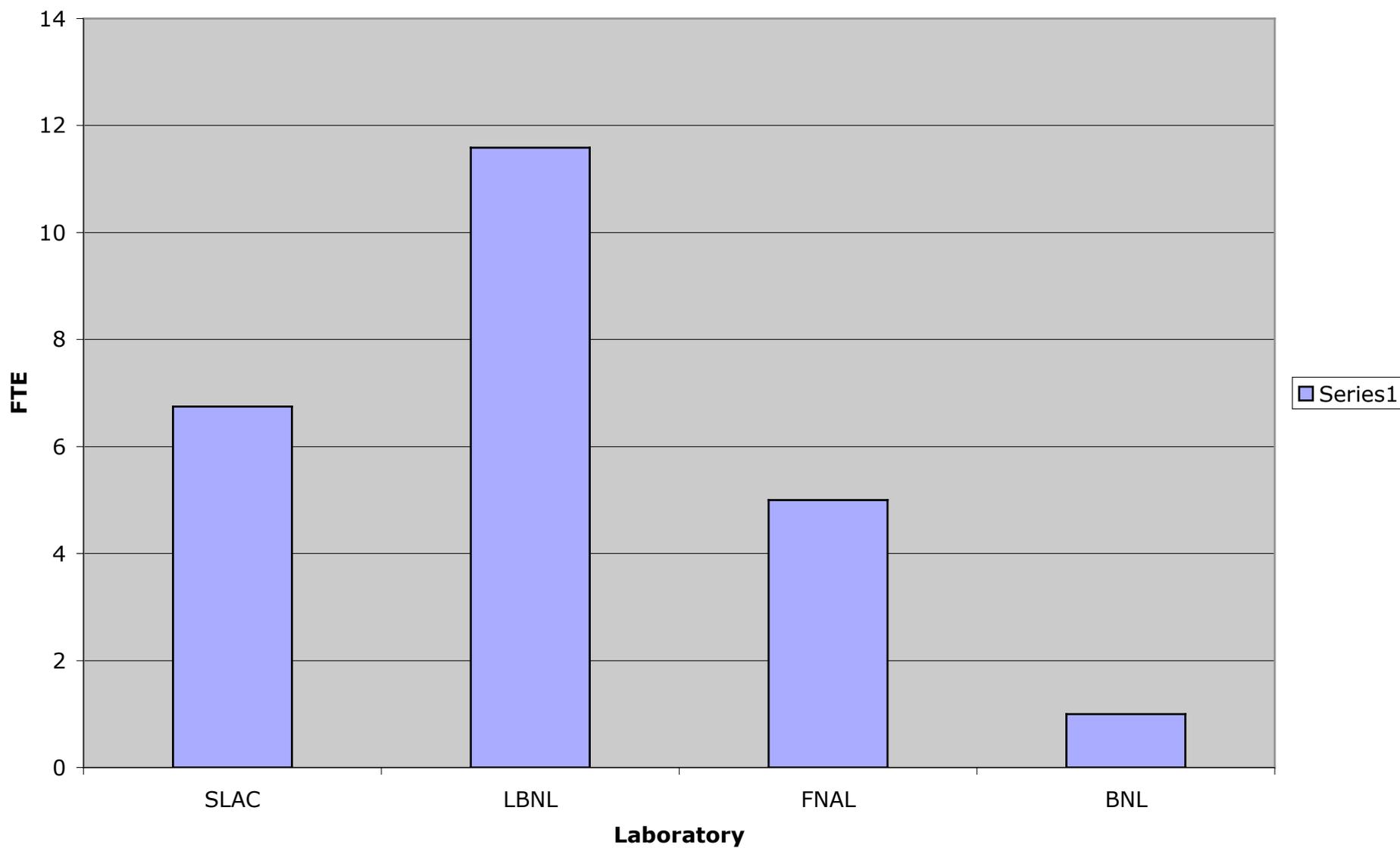


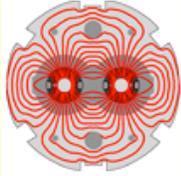
LARP PS2 FTE Requests/FY (Σ al labs)





LARP PS2 FTE Requests/Lab (Σ all FY)





LARP

FY10 & FY11

- For FY10 & FY11, requests total 5 & 6 FTE, resp.
 - If LARP carries 1/2 the effort, need 2.5 & 3 FTE, resp.
 - (e.g. for SLAC accounting, we use \$250...300k/FTE)
- => The requests go beyond the guidance # of 0.5 M\$ p.a.
- Stretching out is not really an option as we'd lose the ability of input to DR.
- => hope LARP can support ≈ 750 k\$/year, else we will need to go back & adjust the plan.
- Beyond FY11 should be revisited at a later time.