

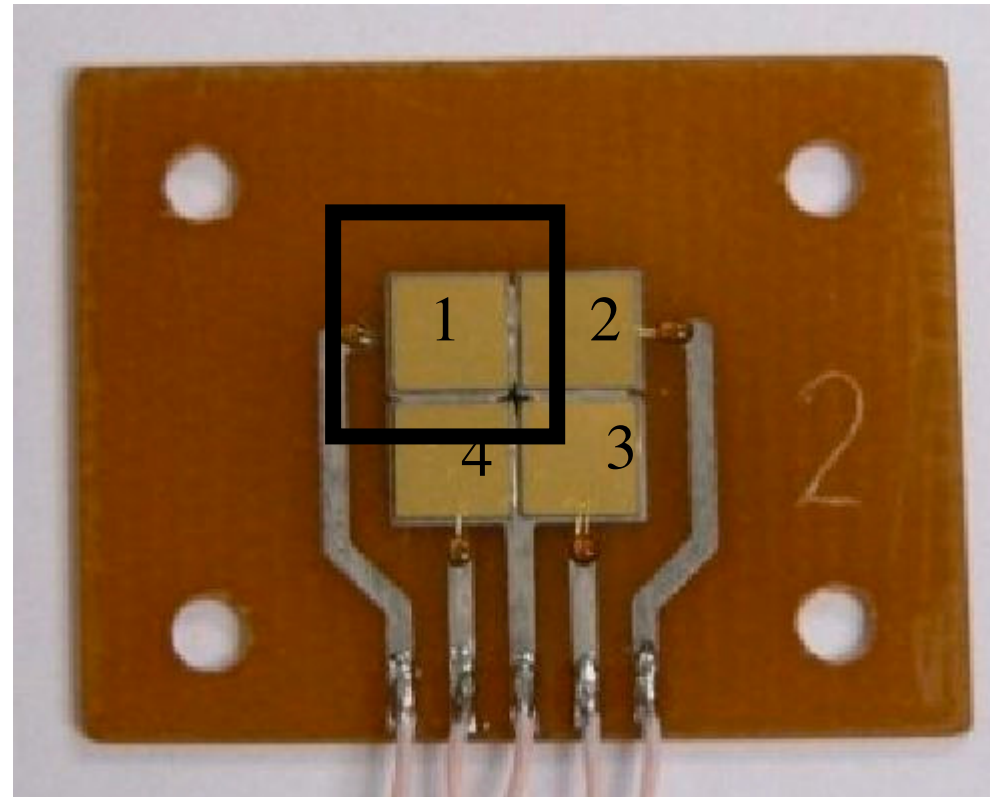
# GaAs Samples

sample#	batch#	concentr	thickness	notes	pad#	irradiated	x	y		c
b9	1	(1-1.5)*10 <sup>17</sup>	171	starting	1	420 kgy	487	476	*	
		nonuniform	168	cce ~ 30%	2	no	483	480		
		Tl	169		3	no	479	481	*	
		I-V nonlinear	173		4	no	469	492		
b11	1		170		1	no	490	471		
			169		2	no	470	490		
			171		3	no	469	493		
			175		4	600 kgy	488	476		
b5	2	(5-6)*10 <sup>17</sup>	186	starting	1	no	490	480	*	14,70
		uniform?	190	cce ~ 40%	2	no	500	480		
		Tl	190		3	no	480	450		
		I-V slightly nonlinear	190		4	820 kgy	490	490	*	14,70
b7	2	the same as sector	195		1	no	483	478	*	
			191		2	no	478	484		
			190		3	470 kgy	481	480	*	
			197		4	no	470	482	damaged	
b2	3	(1-3)*10 <sup>16</sup>	160	starting	1	1.15 Mgy	483	480	*	
		uniform		cce ~ 50%	2	no	478	483	*	
		Sn			3	no			damaged	
		I-V linear			4	no	480	482		
b31	3		160		1	no	480	480		
					2	no	478	483	*	16,70
					3	no	487	476		
					4	1 Mgy	487	474	*	16,70

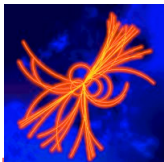


## Sample layout

---



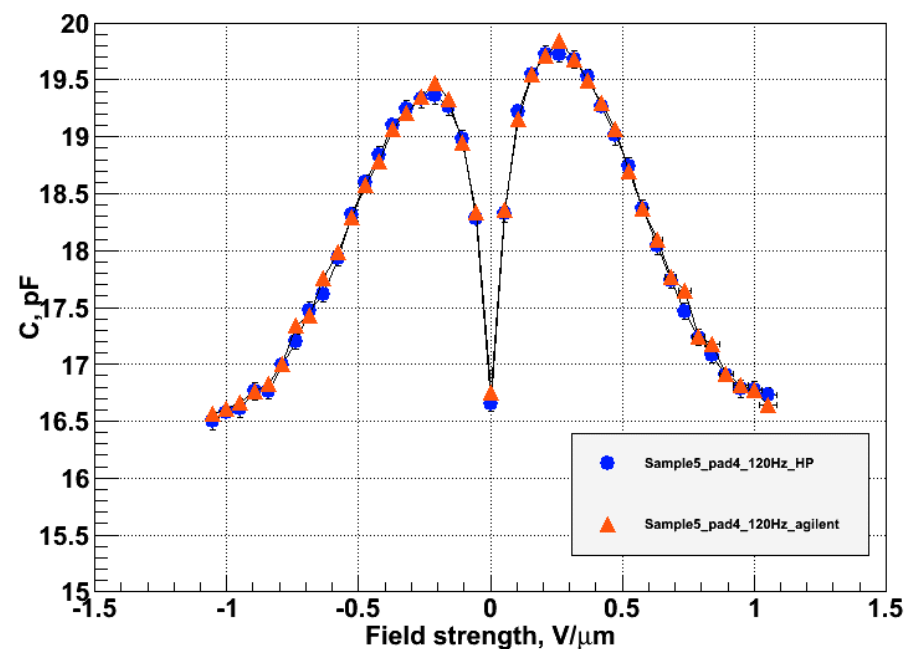
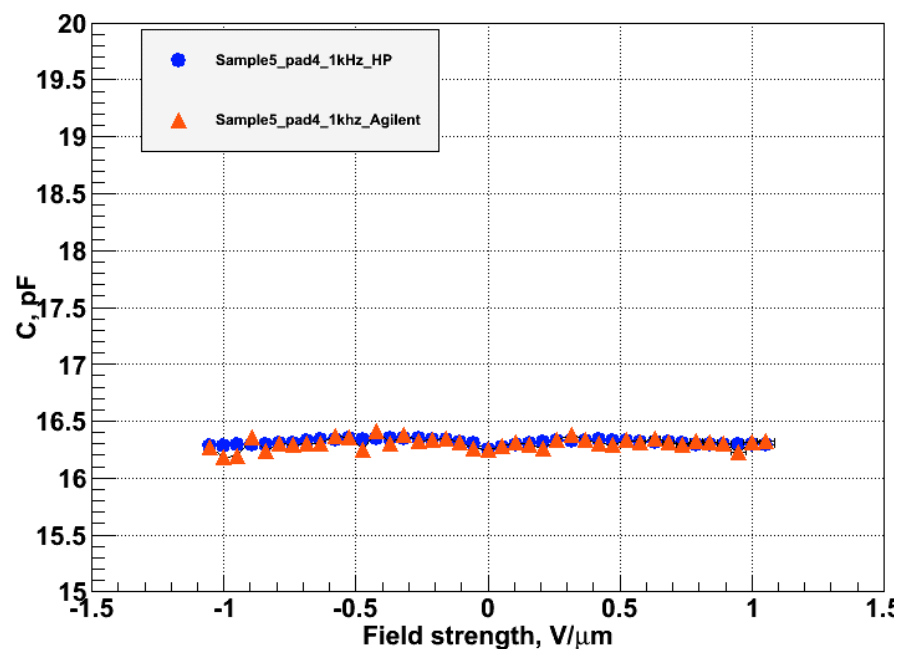
5x5 mm pads, 9x9 mm copper beam collimator

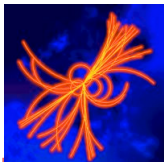


# Instruments

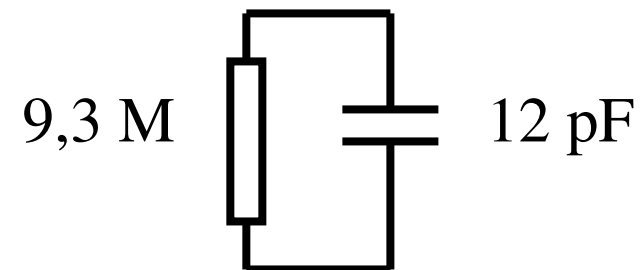
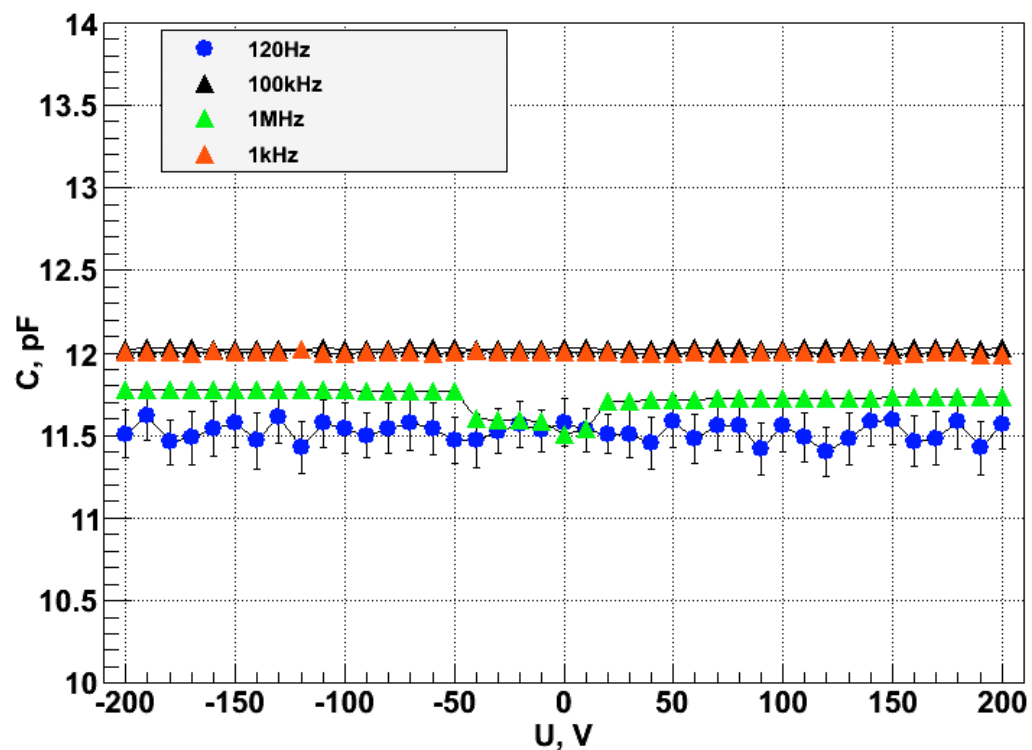
HP 4263B - 120 Hz, 1 kHz, 10 kHz, 100 kHz @ 1V ~U  
Agilent E4981A - 120 Hz, 1kHz, 1 MHz

Contacted with needle probes, open correction for each frequency  
HV range -200V to +200V, 10V steps, 10 seconds setting time



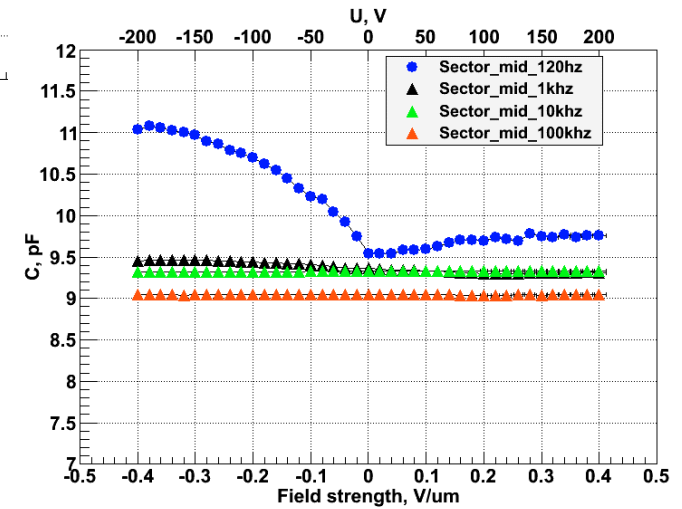
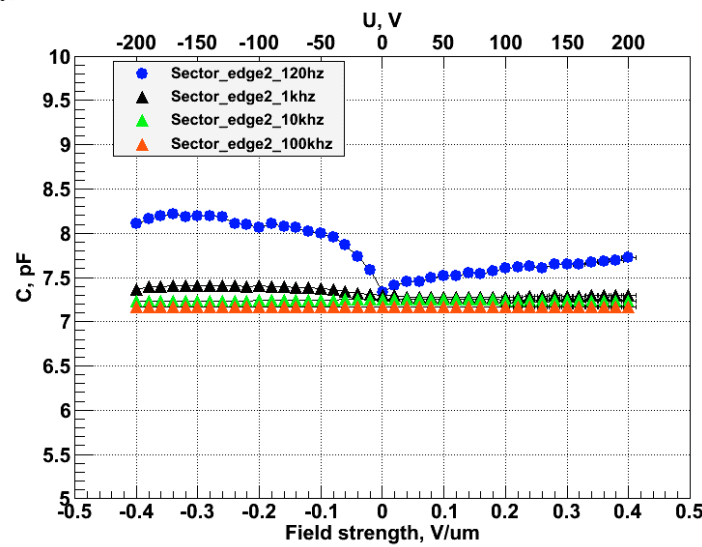
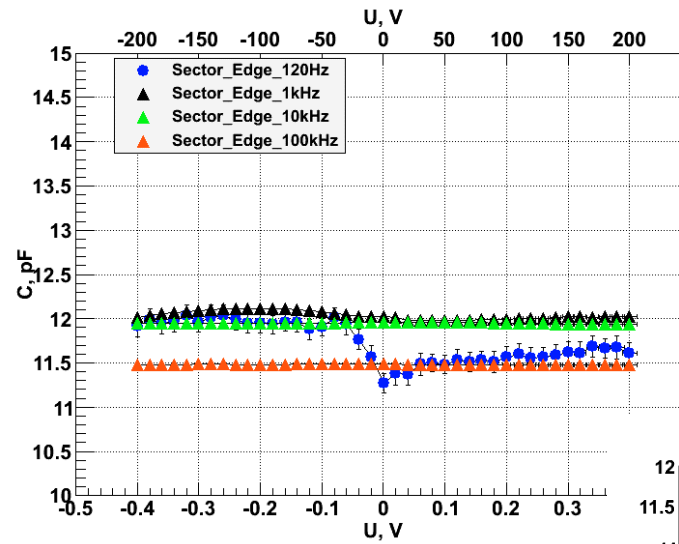
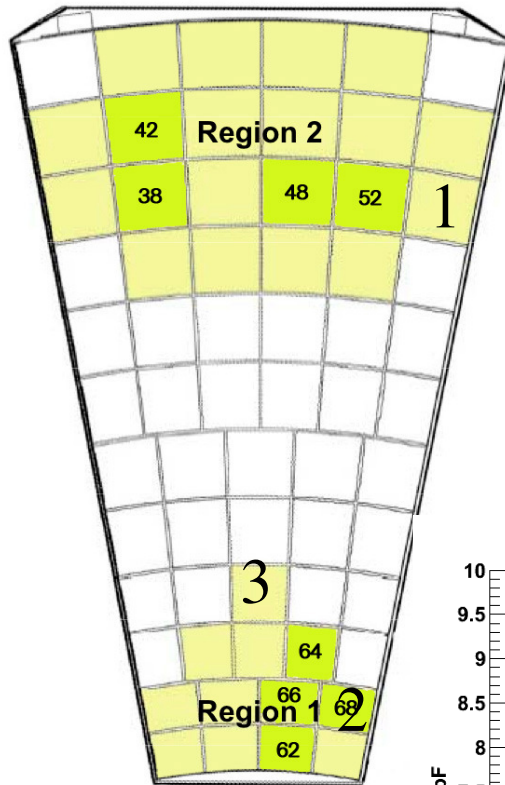


# Mockup



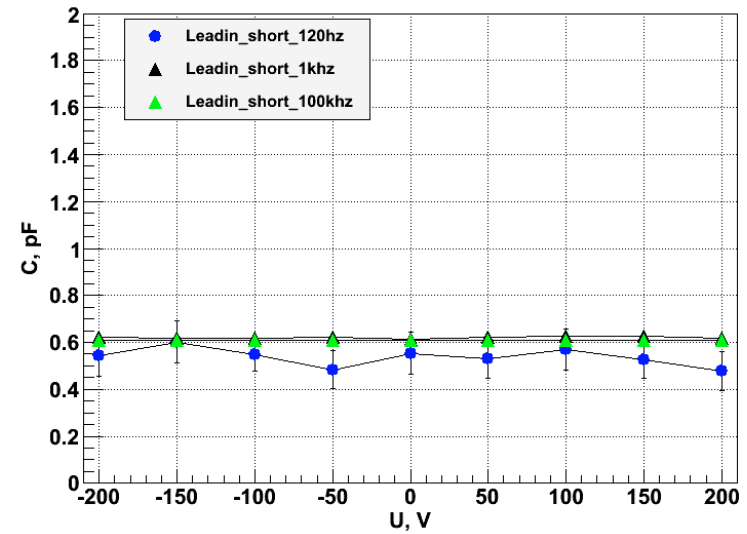
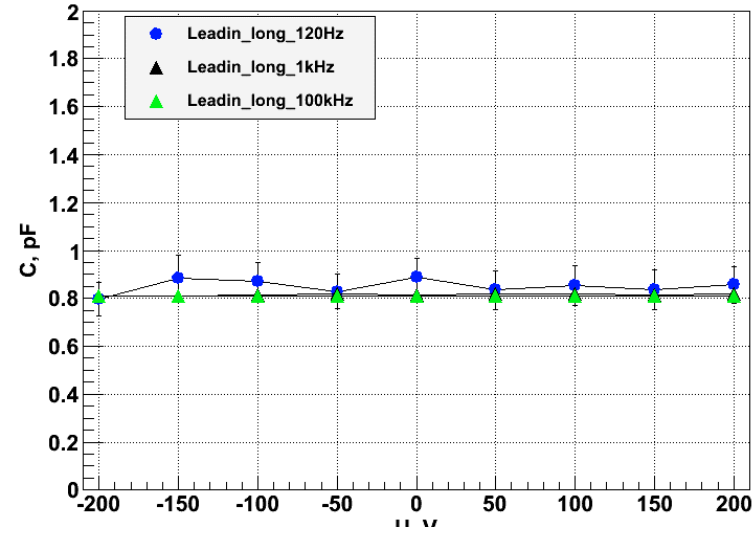
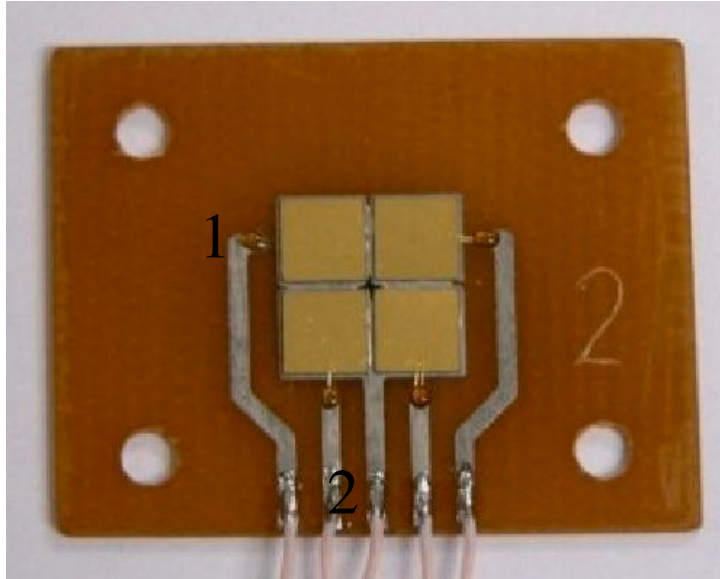


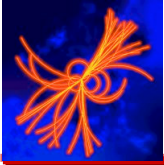
# Sector sample





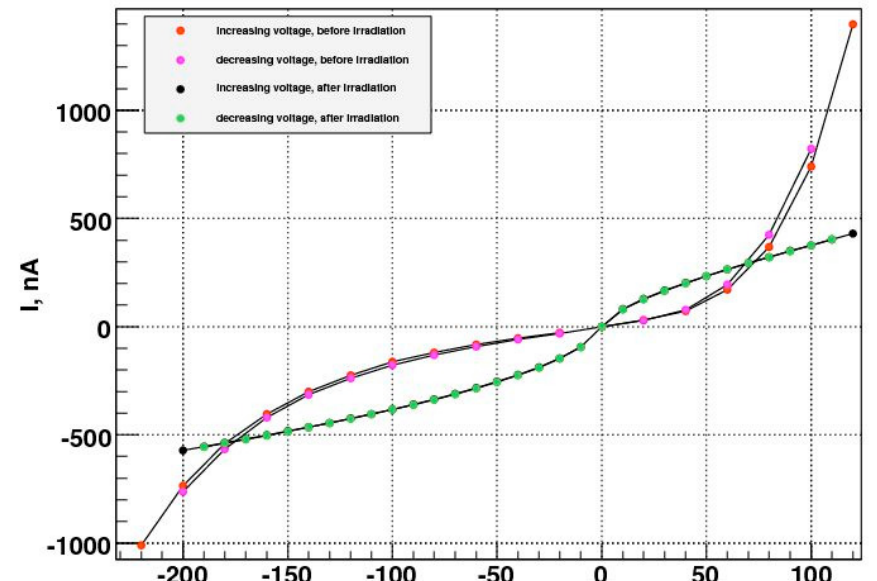
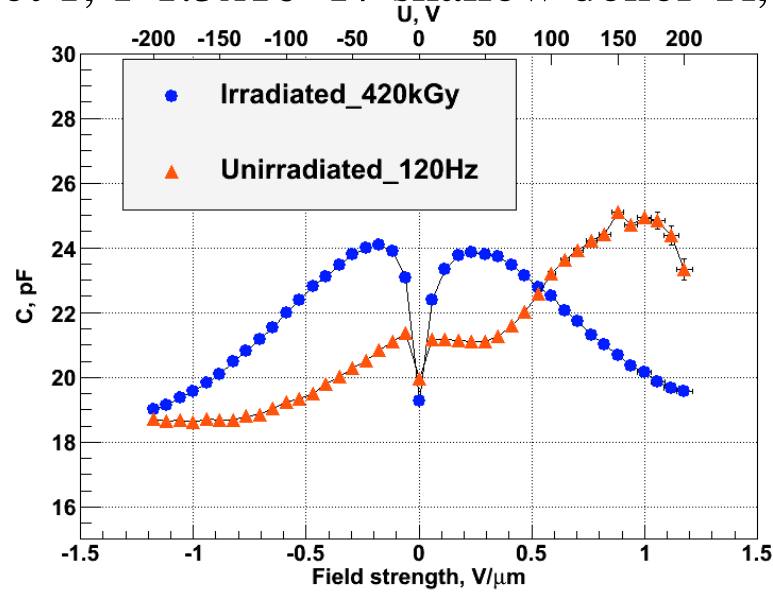
# Leadins





# Sample 9

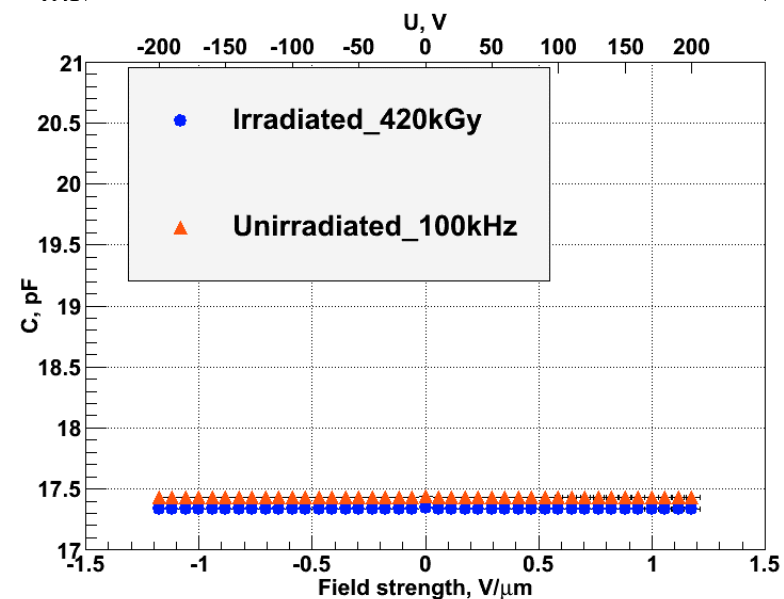
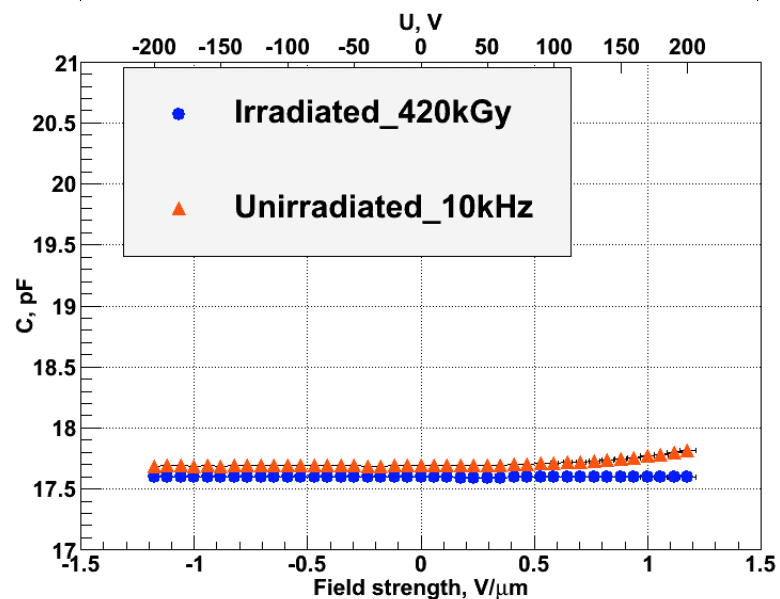
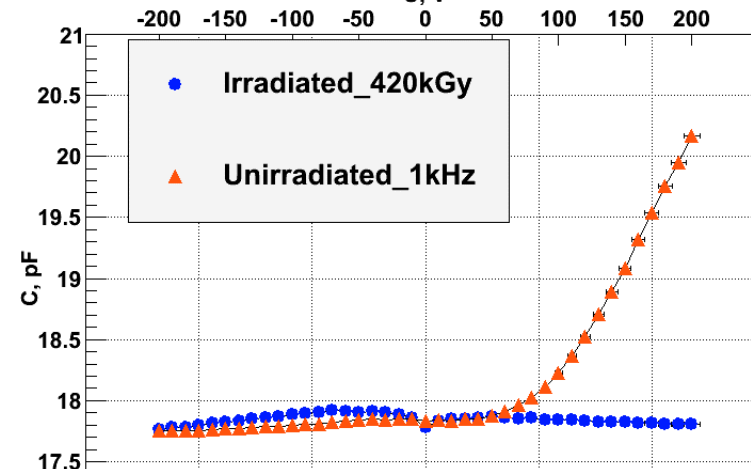
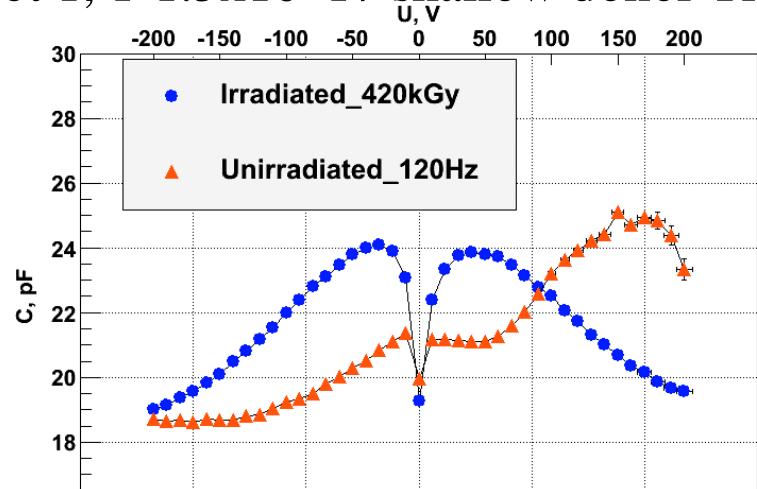
Lot 1,  $1-1.5 \times 10^{17}$  shallow donor Tl, nonuniform doping, Pad 1 - 420 kGy



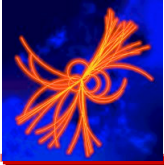


# Sample 9

Lot 1,  $1-1.5 \times 10^{17}$  shallow donor Tl, nonuniform doping, Pad 1 - 420 kGy

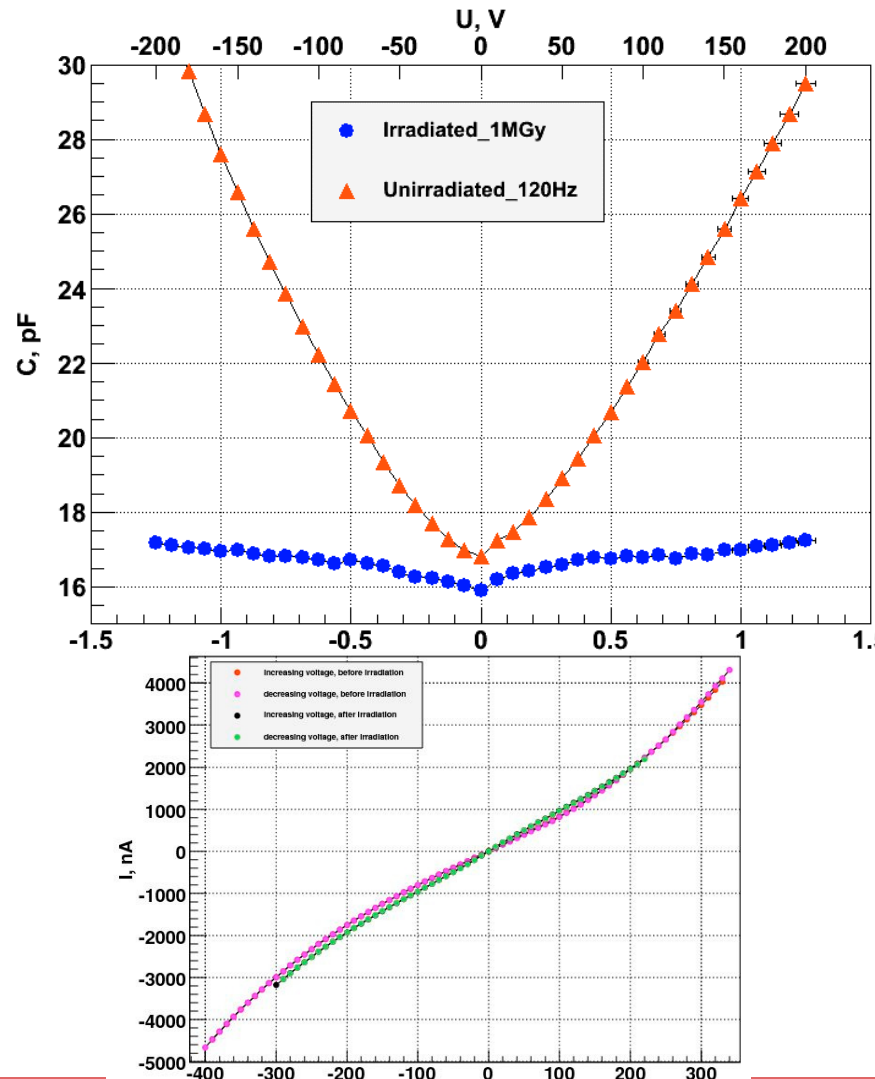




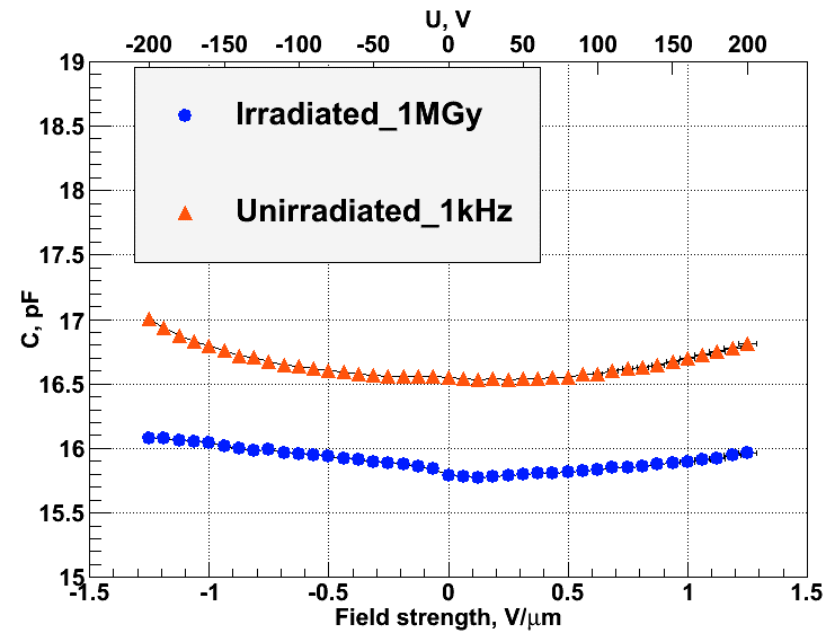


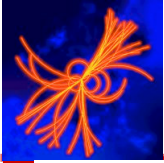
# Sample 31

Lot 3,  $1-3 \times 10^{16}$  shallow donor Sn, uniform doping, Pad 4 - 1 MGy

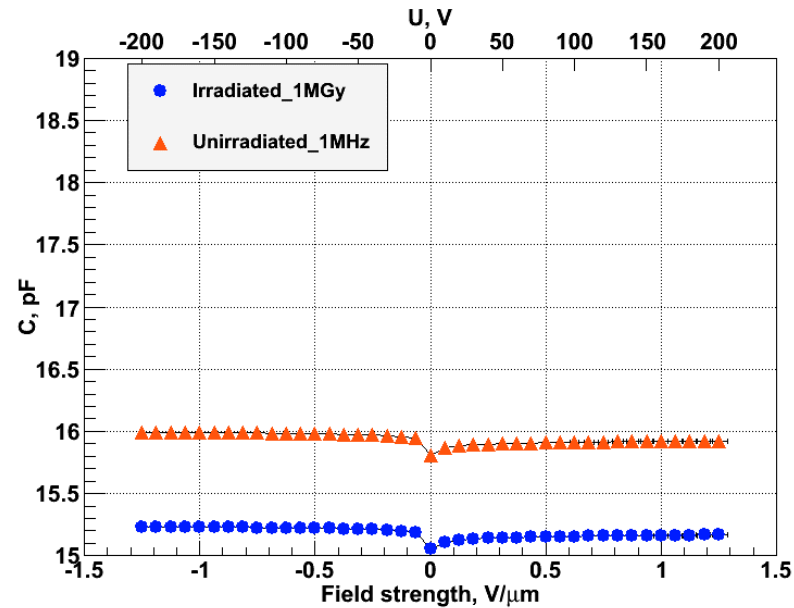
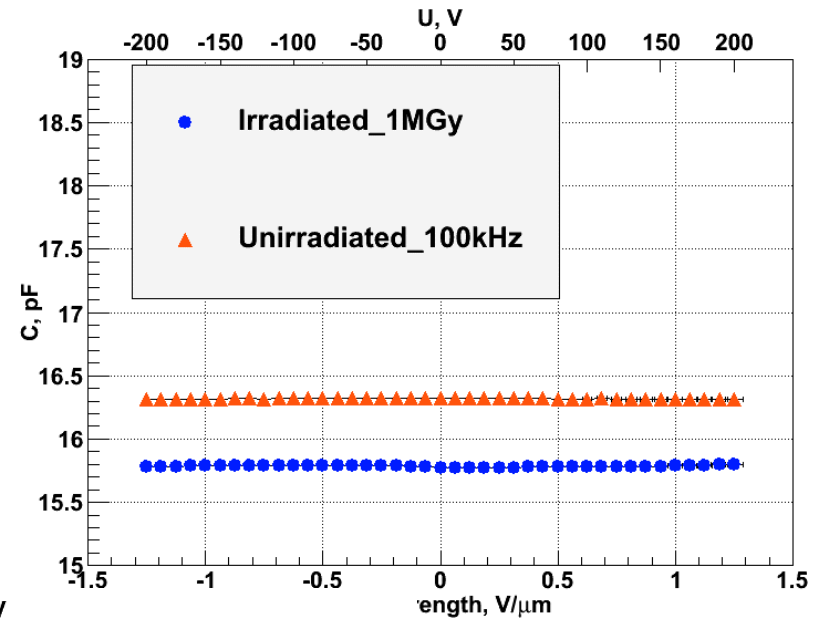
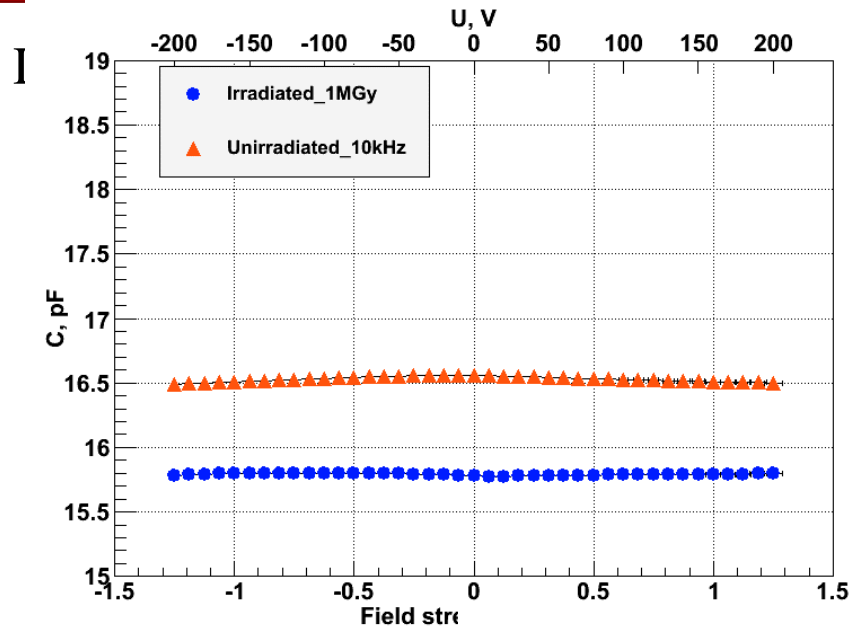


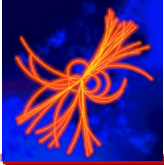
Same behavior for all unirradiated pads





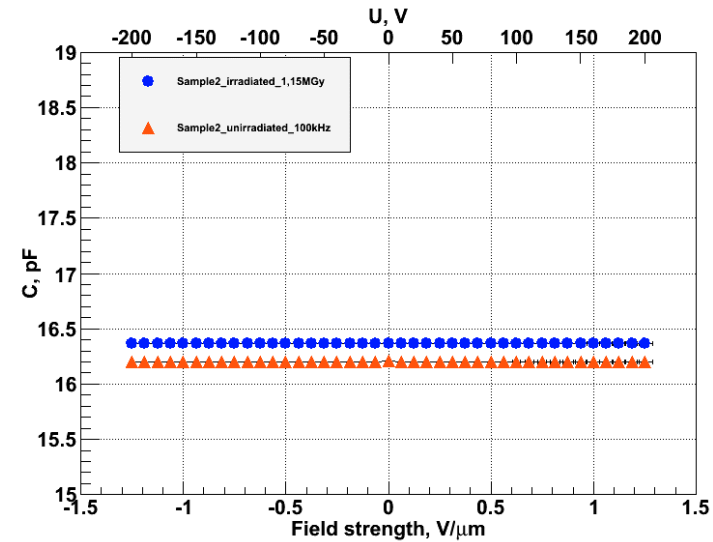
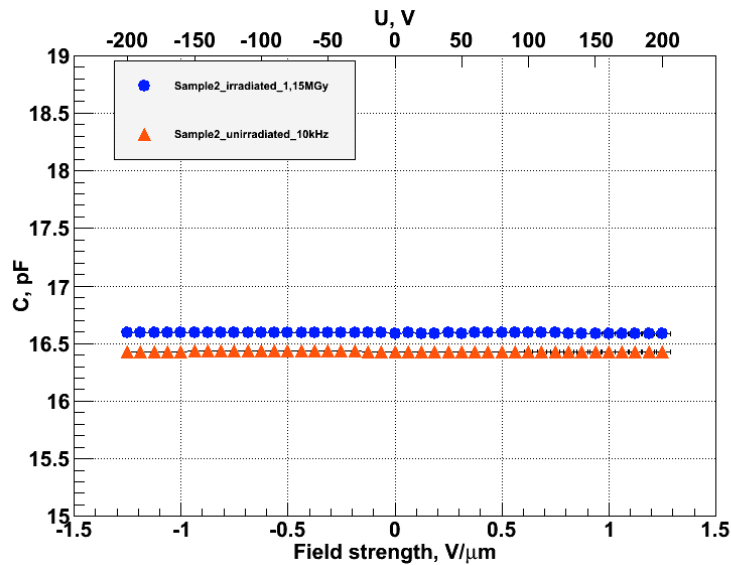
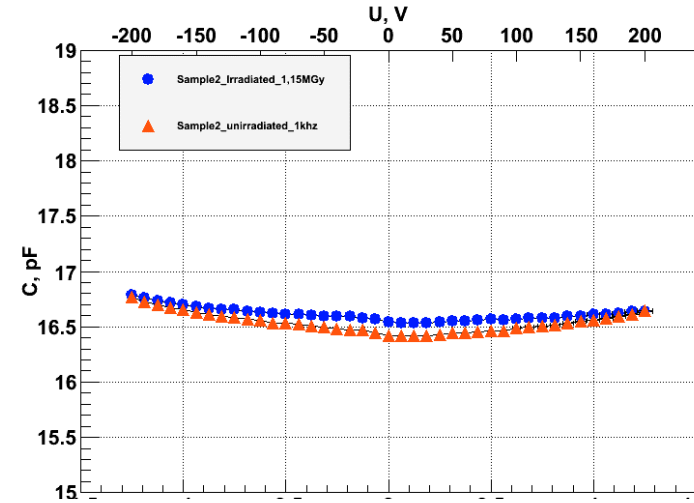
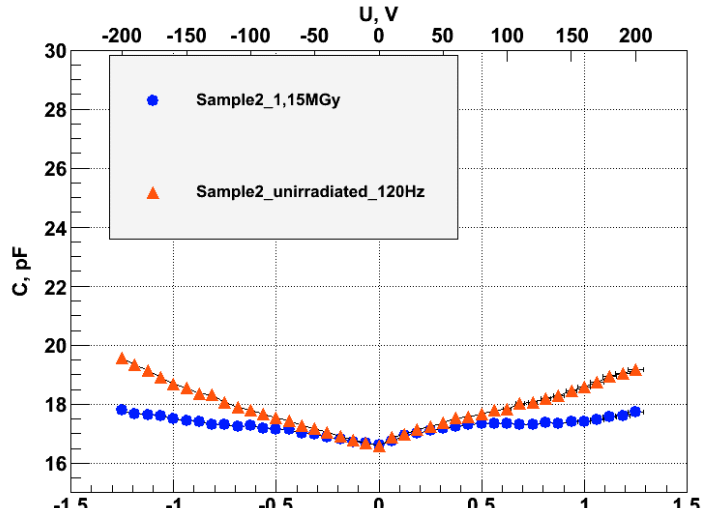
# Sample 31

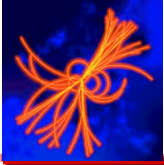




# Sample 2

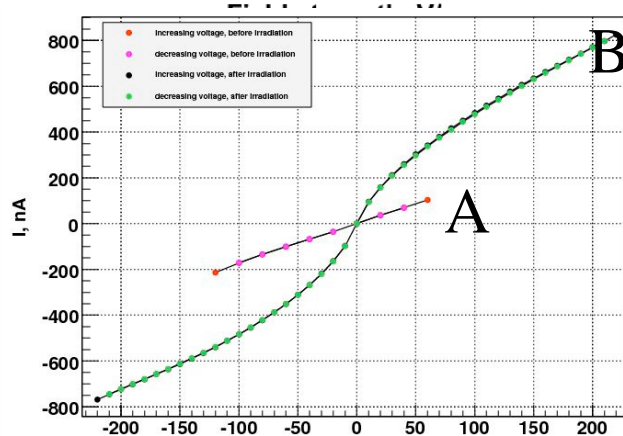
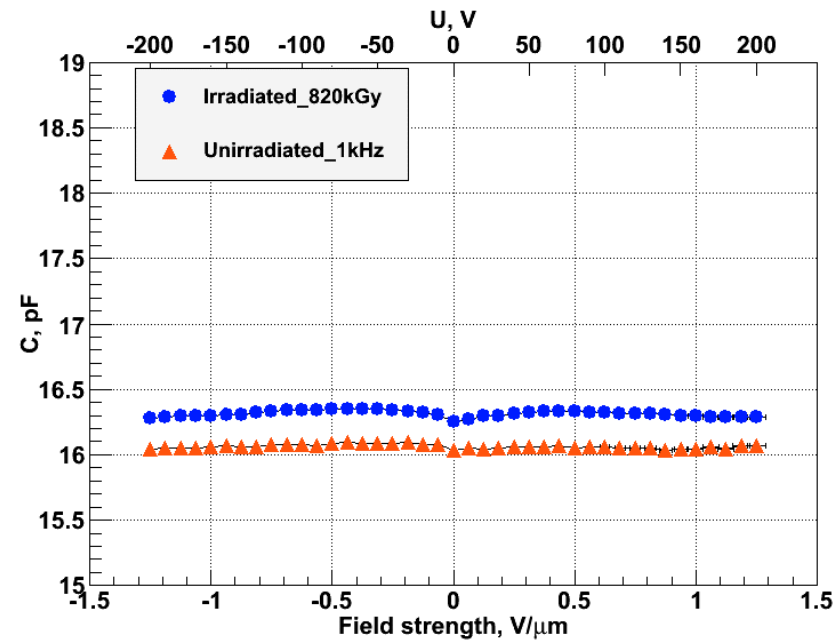
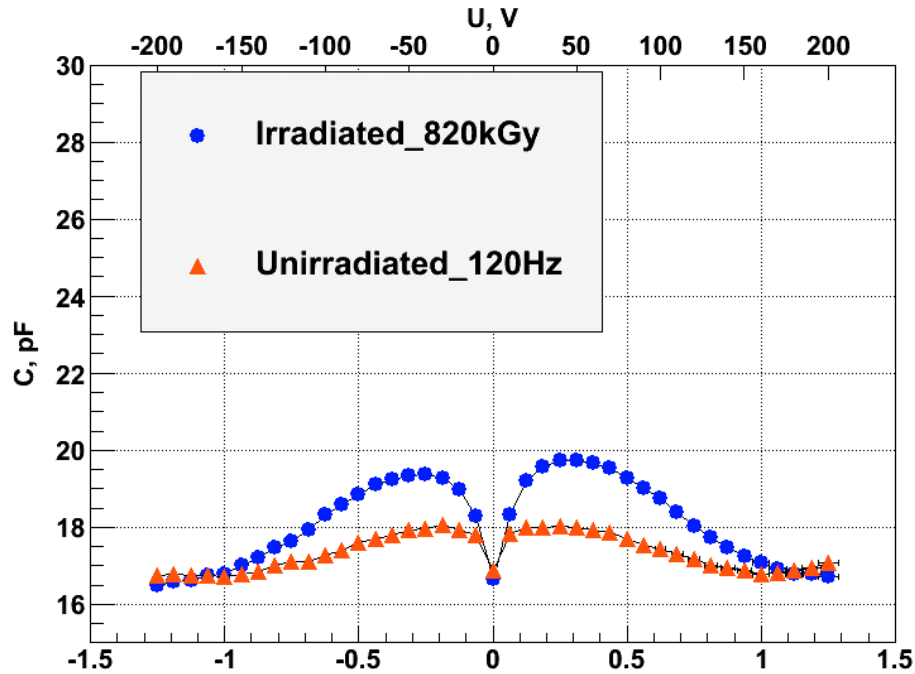
Lot 3,  $1-3 \times 10^{16}$  shallow donor Sn, uniform doping, Pad 1 - 1,15 MGy

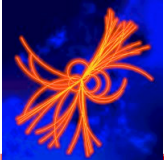




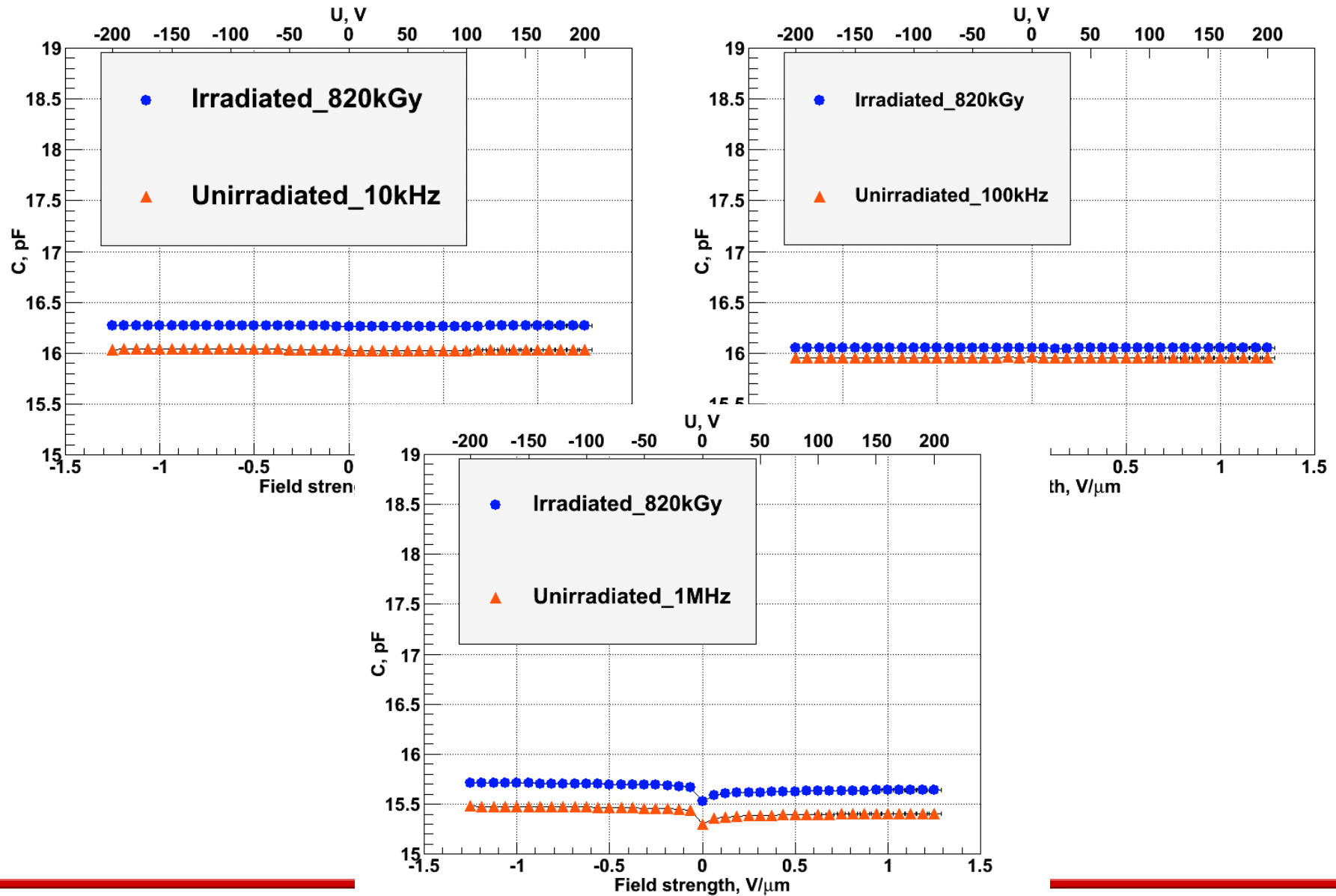
# Sample 5

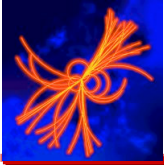
Lot 2,  $5-6 \times 10^{17}$  shallow donor Tl, uniform doping, Pad 4 - 820 kGy, same as sector





# Sample 5





# Sample 7

Lot 2,  $5-6 \times 10^{17}$  shallow donor TI, uniform doping Pad 3 - 470 kGy same as sector

