PHYSICS TSP PROJECTS: SECOND SEMESTER 2011

Please number your preferences from 1 (highest) to 3 (lowest). Indicate at the bottom any preferred partner(s).

NAME: SID:

	Project topic	Preference
1	Hunting for intermediate-mass black holes (Farrell)	
2	Exploring the extreme transient sky (Farrell, Murphy)	
3	How does the brain compute? Distributed dynamical computation in neural circuits (Gong, Robinson)	
4	Co-evolution of dynamics and structures of complex networks (Gong)	
5	Pattern dynamics of three-state neural networks (Gong, Robinson)	
6	Conditions for frozen light in optical waveguides (Gutman, de Sterke)	
7	Variability part I: radio sources from the AT20G survey (Hancock)	
8	Finding your way in the cosmos (Hunstead, Johnston)	
9	Nonlinear entrainment of neural activities in the brain (Kim, Robinson)	
10	Metamaterials: Making the invisible visible, and making the visible invisible (Kuhlmey, Argyros, Fleming)	
11	Characterisation of novel micro-structured polymer fibres for bio-sensing (Kuhlmey, Lee)	
12	Variability part II: optical sources from the Carte du Ciel (Madsen, Hancock)	
13	Optical sensing in solution (McKenzie)	
14	Narcolepsy and microsleeps (Robinson, Postnova, Kim)	
15	Dust charging in plasma crystals and clouds (Samarian)	
16	Dynamics of microparticles in complex plasma (Samarian)	
17	Study of marginal stability in a complex plasma system (Samarian, Vladimirov)	
18	Are my friends your friends too? Measuring hierarchy and overlaps in complex system community structures (Sarkar, Robinson)	
19	Radiation propagation in fluctuating plasmas (Singh, Robinson)	
20	Laser driven electron acceleration (Singh, Robinson)	
21	Ion acceleration during laser-plasma interaction (Singh, Robinson)	
22	Asteroseismology: probing inside stars using stellar oscillations (Stello, Bedding)	
23	Spontaneous symmetry breaking in nonlinear gratings (de Sterke, Kabakova)	
24	Interferometry for exoplanet science aboard the James Webb Space Telescope (Tuthill)	
25	Searching for bumps at hadron colliders (Varvell)	
26	Surface waves in quantum plasmas (Vladimirov, Kompaneets, Tyshetskiy)	

I would like to work with:

Any comments?

RWH May 30, 2011