

Scintillometry with Pulsar VLBI 16-20 October 2017

Programme outline

Day	Session 1	Coffee break	Session 2	Lunch	Session 3	Intermission	Session 4
Mon 16-Oct	9:25 Welcome 9:30 - 11:00 Topical overview 1	11:00 - 11:30	11:30 - 13:00 Topical overview 2	13:00 - 14:00	14:00-15:00 Scattering and lensing models	15:10 - 16:10 CITA seminar	16:30 - 16:50 Scattering and lensing models (contd.) 16:50 - 17:30 Discussion 18:30 Workshop dinner
Tue 17-Oct	9:30 - 10:30 VLBI scintillometry	10:30 - 11:00	11:00 - 11:30 Discussion 11:30 - 12:30 VLBI scintillometry (contd.) 12:30 - 13:00 Discussion	13:00 - 14:00	No session	15:00 - 15:30 Coffee	15:30 - 16:30 Structured discussion
Wed 18-Oct	9:30 - 10:10 Single dish scintillation studies	10:10 - 10:40	10:40 - 11:20 Single dish scintillation studies(contd.) 11:20 - 12:00 Discussion	12:00 - 13:00	13:30 - 15:00 Dunlap Colloquium (Cody Hall, AB)	15:00 - 15:30 Coffee	15:30 - 16:30 Structured discussion (open to all)
Thu 19-Oct	9:30 - 10:30 Black widow system B1957+20	10:30 - 11:00	11:00 - 11:30 Discussion 11:30 - 11:50 B1957+20 (contd.) 11:50 - 12:30 Special objects 12:30 - 13:00 Discussion	13:00 - 14:00	No session	14:10 - 15:10 CITA seminar	15:30 - 16:10 Special objects (contd.) 16:10 - 17:10 Discussion
Fri 20-Oct	10:00 - 11:00 Workshop summary	11:00 - 11:30	11:30 - 13:00 Discussion, research roadmap	13:00 - 14:00	Workshop concludes		16:00 - CITA Desserts

Programme

16 October 2017, Monday

9:25 Ue-Li Pen Welcome and opening remarks

Chair - Ue-Li Pen “Topical Overview”

9:30	Norbert Bartel	VLBI - a historical perspective
10:00	Dan Stinebring	Scintillation arc basics - I
10:30	Barney Rickett	Scintillation arc basics - II
11:00 - 11:30		<i>Coffee break</i>
11:30	Jim Cordes	Magnetoionic properties of the ISM
12:00	Jean-Pierre Macquart	VLBI scintillometry - an overview
12:30	Marten van Kerkwijk	Scintillometry for special pulsar systems

13:00 - 14:00 *Lunch break*

Chair - Jim Cordes “Scattering and Lensing Models”

14:00	Barney Rickett	Scintillation arcs: comparison of observations with scattering and lensing models
14:20	Dana Simard	A predictive model of pulsar scintillation from grazing incidence sheets
14:40	Jean-Pierre Macquart	The effects of plasma birefringence on pulsar scintillation
15:10 - 16:10		<i>CITA Seminar</i> by Kenta Hotokezaka, CCA
16:30	Daniel Baker	Statistical tools from CMB for scintillometry
16:50 - 17:30		Discussion
18:30		<i>Workshop dinner</i>

17 October 2017, Tuesday

Chair - Dan Stinebring “VLBI Scintillometry”

9:30	Norbert Bartel	Substructure in the scatter-broadened image of PSR 0329+54
9:50	Olaf Wucknitz (remote)	Resolving an interstellar echo with low-frequency interferometry
10:10	Alexey Rudnitskiy	Radioastron pulsar observations: scattering parameters measured for five pulsars
10:30 - 11:00		<i>Coffee break</i>
11:00 - 11:30		Discussion
11:30	Franz Kirsten	VLBI on Crab giant pulses at 160 MHz
11:50	Michael Johnson	Scintillometry with VLBI at extreme angular resolution
12:10	Jason Dexter	Locating the intense interstellar scattering towards the inner Galaxy
12:30 - 13:00		Discussion
13:00 - 14:00		<i>Lunch break</i>
15:00 - 15:30		<i>Coffee</i>
15:30 - 17:00	Chair - Jean-Pierre Macquart	Structured discussion

18 October 2017, Wednesday

Chair - Barney Rickett “Single-dish Scintillation Arc Studies”

9:30	Adam Jussila	A scintillation arc survey with the Green Bank Telescope
9:50	Lars Kuenkel	Scintillation studies with LOFAR
10:10 - 10:40		<i>Coffee break</i>
10:40	Stella Koch Ocker	Multiple scintillation arcs in a nearby pulsar, B1133+16: crucial clues?
11:00	Dan Stinebring	A zoo of scintillation arcs
11:20 - 12:00		Discussion
12:00 - 13:00		<i>Lunch break</i>
15:10 - 16:10	Vladimir Soglasnov - <i>Dunlap Colloquium</i>	Resolving scattering disks with ground-space VLBI
15:30 - 16:30	Chair - Marten van Kerkwijk	Open discussion

19 October 2017, Thursday

Chair - Vladimir Soglasnov “Black Widow and Other Special Objects”

9:30	Robert Main	A black widow up close
9:50	Fang Xi Lin	Unravelling the lensing geometry of the black widow
10:10	Dongzi Li	Constraining magnetic fields with a birefringent lens
10:30 - 11:00		<i>Coffee break</i>
11:00 - 11:30		Discussion
11:30	Nikhil Mahajan	Descattering the black widow
11:50	Matthew Kerr	Two extreme scattering events towards young pulsars
12:10	Stefan Oslowski	Probing the extreme conditions in the ionized interstellar medium towards PSR J1509+5531
12:30 - 13:00		Discussion
13:00 - 14:00		<i>Lunch break</i>
14:10 - 15:10		<i>CITA Seminar</i> by Brian O’Shea, MSU

Chair - Rene Breton “Special Objects (cont.)”

15:30	Elliot Polzin	Scintillometry of the black widow J1810+1744
15:50	Artem Tuntsov	Caustics in dynamic spectra, annoying but useful
16:10 - 17:10		Structured discussion

20 October 2017, Friday

10:00	Ue-Li Pen	Workshop summary
11:00 - 11:30		<i>Coffee break</i>
11:30	Jean-Pierre Macquart	The future of scintillometry: questions, avenues and prospects
13:00 - 14:00		<i>Lunch</i>
		----- <i>Workshop concludes</i> -----
16:00 - 17:00		<i>CITA Desserts</i>