

ESO Workshop on
Deaths of Stars and Lives of Galaxies

ESO Vitacura, Santiago, Chile
08–12 April 2013

PROGRAMME

Sunday 07/04

16:00 – 19:00 Welcome drink and registration

Monday 08/04

Chair: R. Corradi — Session I —

09:00 – 09:10 H. Boffin & F. Comeron: WELCOME

09:10 – 10:00 A. Karakas (Invited): MODELLING STELLAR EVOLUTION FROM THE MS THROUGH TO THE POST-AGB

10:00 – 10:50 F. Herwig (Invited): STELLAR HYDRODYNAMICS AND NUCLEAR REACTION RATE UNCERTAINTIES IN AGB STARS

10:50 – 11:20 COFFEE BREAK

11:20 – 12:10 O. De Marco (Invited): THE PROGENITORS OF PLANETARY NEBULAE

12:10 – 12:35 H.M.J. Boffin: LOOKING AT FRESH OUT OF THE OVEN PECULIAR RED GIANTS

12:35 – 13:00 W. Maciel: STELLAR LIFETIMES AND ABUNDANCE GRADIENTS: HINTS FROM CENTRAL STARS OF PLANETARY NEBULAE

13:00 – 14:30 LUNCH

Chair: R. Costa — Session II —

14:30 – 14:55 D. Jones: PROBING CLOSE-BINARY EVOLUTION USING THE MORPHOKINEMATICS OF PLANETARY NEBULAE

14:55 – 15:20 A. Tyndall: PN LoTr1 AND ITS RELATION TO PLANETARY NEBULAE POSSESSING BINARY/BA STARS

15:20 – 16:10 M. Bode (Invited): THE OUTBURSTS OF RECURRENT NOVAE

16:10 -16:30 TEA

16:30 – 16:55 O. Chesneau: HIGH RESOLUTION OBSERVATIONS OF INTERACTING BINARIES

16:55 – 17:20 K. Shen: TYPE IA SUPERNOVAE FROM DOUBLE DETONATIONS: IGNITION AND CIRCUMSTELLAR INTERACTION

17:20 – 17:45 A. Ruiter: CAN WHITE DWARF MERGERS EXPLAIN MOST TYPE IA SUPERNOVAE?

Tuesday 09/04

Chair: D. Jones — Session III —

- 09:00 – 09:50 G. Meynet (Invited): THE EVOLUTION OF MASSIVE STARS
09:50 – 10:40 N. Smith (Invited): LINKS BETWEEN MASSIVE STARS, PLANETARY NEBULAE, AND THEIR TRANSIENT SOURCES
10:40 – 11:05 J. Groh: THE SURPRISING LOOK OF MASSIVE STARS BEFORE DEATH

11:05 – 11:30 COFFEE BREAK

- 11:30 – 11:55 T. Moriya: REVEALING EXPLOSIVE MASS LOSS DECADES BEFORE MASSIVE STAR EXPLOSIONS FROM TYPE II IN SUPERNOVA LIGHT CURVE MODELING
11:55 – 12:45 H.T. Janka (Invited): EXPLOSION MODELS OF MASSIVE STARS

12:45 – 14:00 DISCUSSION and LUNCH

Chair: M. Hamuy — Session IV —

- 14:00 – 14:25 F. Bufano: UNVEILING TYPE IIb SN PROGENITORS: THE CASE OF THE FAST AND FAINT SN2011hs
14:25 – 14:50 B. Messer: AXISYMMETRIC CORE-COLLAPSE SUPERNOVA SIMULATIONS OF 12-25 SOLAR MASS PROGENITORS
14:50 – 15:15 B. Mueller: GENERAL RELATIVISTIC MULTI-D EXPLOSION MODELS OF CORE-COLLAPSE SUPERNOVAE

15:15 – 15:50 POSTER SESSION and TEA

- 15:50 – 16:40 D.R. Goncalves (Invited): ON THE DETERMINATION OF NEBULAR ABUNDANCE
16:40 – 17:05 L. Guzman-Ramirez: VISIR: TOWARDS EXPLAINING THE FORMATION OF C-RICH MOLECULES IN O-RICH PNE
17:05 – 17:30 D. Ladjal: HERPLANS: A TALE OF MASS LOSS FROM PLANETARY NEBULAE

Wednesday 10/04

Chair: M. Arnaboldi — Session V —

- 09:00 – 09:50 I. Cherchneff (Invited): THE PHYSICS OF DUST PRODUCTION
09:50 – 10:40 M. Matsuura (Invited): DUST IN PLANETARY NEBULAE AND SUPERNOVAE
10:40 – 11:05 O. Jones: METALLICITY DEPENDENCE OF CRYSTALLINE SILICATES IN EVOLVED STARS

11:05 - 11:30 COFFEE

- 11:30 – 11:55 E. Lagarde: HOW METALLICITY AFFECTS DUST PRODUCTION FROM EVOLVED STARS
11:55 – 12:20 C. Nicholls: DUST PRODUCTION IN A BINARY MERGER: THE CASE OF V1309 SCO

12:30 – 14:00 LUNCH

Free Afternoon

Thursday 11/04

Chair: B. Leibundgut — Session VI —

- 09:00 – 09:25 F. Forster: EVIDENCE FOR CIRCUMSTELLAR MATERIAL IN SNE IA

- 09:25 – 10:15 N. Cox (Invited): ASTROSPHERES: INTERACTIONS BETWEEN STELLAR WINDS AND THE LOCAL INTERSTELLAR ENVIRONMENTS OF YOUNG AND OLD STARS
10:15 – 10:40 P. Owen: THE MASS OF DUST IN THE CRAB NEBULA: RT MODELS WITH SMOOTH AND CLUMPED DUST DISTRIBUTIONS

10:40 – 11:10 DISCUSSION and COFFEE

- 11:10 – 12:00 P. Crowther (Invited): VERY MASSIVE STARS (AND THEIR DEATH) IN THE LOCAL UNIVERSE
12:00 – 12:25 A. Thygesen: THE ISOTOPIC MIXTURE OF MAGNESIUM IN 47 TUCANAE
12:25 – 12:50 A. Alves-Brito: CHEMICAL ABUNDANCE ANOMALIES AS TRACERS OF MULTIPLE STELLAR POPULATIONS IN THE GALACTIC GLOBULAR CLUSTER M22

12:50 – 14:00 LUNCH

Chair: R. Wesson — *Session VII* —

- 14:00 – 14:25 G. Carraro: FINAL PRODUCTS OF STELLAR EVOLUTION IN THE HIGH-METALLICITY ENVIRONMENTS AND THE UV UPTURN IN ELLIPTICAL GALAXIES
14:20 – 15:15 F. Matteucci (Invited): CHEMICAL EVOLUTION OF GALAXIES
15:15 – 15:40 S. Habergham: USING SUPERNOVAE AS TRACERS OF STELLAR POPULATIONS

15:40 – 16:00 TEA

- 16:00 – 16:50 M. Arnaboldi (Invited): PLANETARY NEBULAE POPULATIONS IN EXTERNAL GALAXIES
16:50 – 17:15 W. Reid: A NEW LMC PNLF AND KINEMATIC MAPPING USING PNE AS EVOLUTIONARY TRACERS
17:15 – 17:40 S. Srinivasan: THE MASS-LOSS RETURN FROM EVOLVED STARS TO THE MAGELLANIC CLOUDS

17:45 Bus leaves
19:00 SOCIAL DINNER

Friday 12/04

Chair: F. Matteucci — *Session VIII* —

- 10:00 – 10:50 B. Leibundgut (Invited): TYPE IA SUPERNOVAE AS DISTANCE INDICATORS
10:50 – 11:15 M. Moreno: ELEMENTAL ABUNDANCES ON GALAXIES HOSTING SN IA FROM SLOAN /SDSS

11:15 – 11:45 POSTERS and COFFEE BREAK

- 11:45 – 13:00 N. Soker (Invited): Summary and Final discussion

13:00 – 14:30 LUNCH and GOODBYE