

Brainstorming and Fun: Stellar Evolution/Explosions, Nuclear/Particle Physics Input, Origin of the Elements and Evolution of Galaxies

(schedule of workshop/meeting in Basel 29-30 September 2014)

Topics (Working Groups?) and participant distribution (naming expertise, not necessarily a talk):

1. Nuclear/Particle Input:

K. Blaum (nuclear masses), A. Schwenk (nuclear properties), I. Panov, M. Eichler (beta-decay and fission), Z. Fülöp, T. Rauscher (nuclear reactions), M. Hempel, A. Yudin (EoS), A. Lohs, M.-R. Wu, M. Frensel (neutrino interactions/oscillations)

2. Stellar Evolution:

Georges Meynet, R. Hirschi (evolution of massive stars, spin stars / rotation, mass loss, magnetic fields), H. Möller (super AGB stars), M. Pignatari (pulses, ^{13}C pocket, s-process), U. Battino (type Ia progenitors in binary systems)

3. Supernovae (neutrino-driven and magneto-rotation, Ia's):

M. Liebendörfer, R. Cabezón, K. Kotake, K. Takiwaki, K. Nakamura, A. Lohs, K. Kuroda, K.-C. Pan (core collapse and neutrino transport); K. Ebinger, C. Fröhlich (nucleosynthesis); R. Käppeli, K. Takiwaki, N. Nishimura (MHD collapse); R. Cabezón, C. Travaglio (type Ia)

4. Hypernovae/GRBs, X-ray bursts:

S. Rosswog, T. Piran, A. Arcones, K. Hotokezaka (n-star mergers); R. Käppeli, F.-K. Thielemann (MHD jets); S. Fehlmann, J. Reichert (X-ray bursts)

5. Explosion observations / remnants (dust?), Low metallicity stars, Galactic evolution plus combined nucleosynthesis processes of all mentioned sites:

J. Cowan, R. Diehl, L. Mashonkina, T. Mishenina (observations); F. Matteucci, N. Prantzos, A. Arcones, M. Pignatari, B. Wehmeyer, F. Thielemann (modeling), and everybody else

Schedule (attempt to contribute to the discussion with 2 or 3 concise slides with main points/results/open questions/conclusions): see however on the web, that this changed to a list of talks

for those who arrived before 8pm on Sunday:

8pm: Dinner in Indian Restaurant

Start on Monday 29 September at 10am in Lecture Hall/Hörsaal 2 (Physics Building, 2nd floor =1 in elevator)

10-10:15 Welcome and election of convenors

Then going once through all topics (due to arrival times not in logical order)

10:15 - 11:30 Nuclear/Particle Input

11:30 - 12:45 Supernovae

12:50 - 14:00 lunch in Mensa (4th floor = 3 in elevator)

14:00 - 15:15 GRBs/Hypernovae, X-ray bursts

15:15 - 16:30 Stellar Evolution

16:30 -17:00 Coffee Break

17:00 - 18:45 Galactic Evolution

19:30 Dinner in Restaurant Schnabel <http://www.restaurant-schnabel.ch/>

Start Tuesday 30 September 8:30 am in Lecture Hall/Hörsaal 1 (ground floor, entrance St. Johannis-Ring) going once more through all topics, new ideas which have come over night, things we left out the first day

8:30 - 9:00 Nucl/Part

9:00 - 9:30 Stellar Ev.

9:30 - 10:00 Supernovae

10:00 - 10:30 coffee break

10:30 - 11:00 GRBs/Hypernovae, XRBs

11:00 - 11:30 Galactic Evolution

11:50-13:00 lunch in Mensa

13:00-15:00 little excursion along Rhine River to old downtown

15:00-18:00 Meeting of individual working groups in different class rooms, attempt to write up results by convenors with the help of whole workings groups

19:30 Dinner in Löwenzorn

<http://www.loewenzorn.ch/en/>

the convenors give a short written report

Farewell, except for those who stay longer

(all local costs are covered -hotel, lunches, dinners – let me know on Monday if you need travel support as well)