SUBJECT	Meeting: Zooming in on Star Formation	
DATE / PLACE	**Date June 10-14 2019**	**Nafplio (Greece)**
PARTICIPANT	Zavagno	Annie
REASON FOR PARTICIPATION	Invited talk	
WEBPAGE OF THE EVENT	https://indico.nbi.ku.dk/event/1055/	

1   Agenda

Invited speakers

I -- The life and career of Ake Nordlund

Uffe Jorgensen (Niels Bohr Institute, Copenhagen)

II -- Galactic scale star formation

Diane Cormier (CEA, Saclay)

Davide Elia (IAPS-INAF, Rome)

Eve Ostriker (Princeton)

III -- The formation of Molecular clouds. Sources and characteristics of interstellar turbulence

Hua-bai Li (Chinese University of Hong Kong)

Paolo Padoan (ICREA & ICC, Barcelona)

IV -- Cloud fragmentation. Filaments. Core mass function. Initial stellar mass function

Philippe Andre (CEA, Saclay)

Troels Haugboelle (NBI & Starplan, Copenhagen)

Patrick Hennebelle (CEA, Saclay)

V -- Low mass star formation. Disk formation. Non-ideal MHD effects

Sarah Sadavoy (CfA, Harvard)

Kengo Tomida (Osaka)

VI-- Solar/stellar physics. Connections to star formation

Bengt Gustafsson (Uppsala)

Thomas Nordlander (Australian National University)

VII -- High mass star formation--Early Phases, individual objects

Sylvain Bontemps (Bordeaux)

Rolf Kuiper (Tuebingen)

VIII -- Stellar clusters, massive stars in clusters, stellar feedback

Richard Wunsch (Prague)

Annie Zavagno (LAM, Marseille)

IX -- Planet formation. Formation of the Solar system

Yuri Fujii (Nagoya)

Jonathan Tan (Chalmers)

Diego Turrini (IAPS-INAF, Rome)

X -- Advances in code development for computational fluid dynamics

Ake Nordlund (NBI & Starplan, Copenhagen)

Jim Stone (Princeton)

2   Notes

I was invited in this meeting for my expertise about the role of HII regions in high mass star formation. I gave an invited talk there. I presented the recent results we obtained with ArTéMiS on APEX about the filaments around HII regions and their compression by the ionized gas. I presented the results we obtained on RCW 120 (Zavagno et al. in preparation). We see a clear compression for the HII region's interior on the filaments' profile. This result is important because this compression could play a key role in the generation of a new wave of star formation around HII regions. This is important for the community because HII regions have an important role in triggering the formation of a new generation of massive stars. This early compression from the ionizing radiation on the filaments that host the star formation could also impact the properties of the future clumps that will form stars. We are currently testing this hypothesis in a large sample of Galactic HII regions (Zhang, S. et al. submitted). This phenomenon is important because at least 30% of the young high mass stars in the Galaxy are observed at the edges of HII regions.

During the meeting, recent developments in observations and theoretical study of star formation were presented together with numerical simulations of high mass star formation and observations of the magnetic field on all spatial scales. These results highlight the key role of multi scale and multi wavelength studies. This is what we do in our research group for many years.

3   IDEAS / Conclusions

From discussions organized at the meeting (at the end of each sessions) the role of dedicated numerical simulations centred on specific observed cases has been pointed out. I had discussions with people who do numerical simulations and I will start a collaboration with C. Wareing (University of Leeds) about a dedicated numerical simulation of bipolar HII regions.