





#### COLD MOLECULAR IONS AT THE QUANTUM LIMIT

### **Greetings from Paris**

## 3<sup>rd</sup> COMIQ Training Event

The last Training Event took place in Paris, April 5-8, 2016 at the Laboratoire Kastler Brossel, Université Pierre et Marie Curie, Paris. Thanks to all ESRs, group leaders, expert speakers and local organisers for contributing to make the event a success.

All teaching materials can be found at the Wiki website <a href="www.comiq.au.dk">www.comiq.au.dk</a> (password protected).

## Final COMIQ Meeting and Workshop

## 4<sup>th</sup> COMIQ Event

The final COMIQ Meeting and Training will take place at Les Houches in France the 28<sup>th</sup> of May - 2<sup>nd</sup> of June, 2017.

The event will include expert speakers, public lectures, student sessions and much more.

More information will soon be available at the website <a href="https://www.itn-comiq.eu">www.itn-comiq.eu</a>

# Group Picture with the COMIQ Team



From left to right: Alexander Dörfler, Stefan Willitsch, Lorenzo Petralia, Kaveh Najafian, Ilia Sergachev, Laurent Hilico, Michael Depalatis, Amir Mahdian, Brianna Heazelwood, Michael Drewsen, Ivan Kortunov, Olivier Dulieu, Jan Christoph Heip, Karin Fisher, Jacob Esmann Poulsen, Milán Negyedi, Steffen Meyer, Johannes Heinrich, Julian Glässel, Humberto da Silva jr., Ibrokhim Iskandarov and Ashwin Bodetti

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## **COMIQ Interviews**

The COMIQ project is in its third year, and ER, Mike DePalatis, has already finished his post doc period in the project. Within a year, the first fellows will have submitted their thesis within the field 'Cold Molecular lons at the Quantum limit'. Mike DePaltis, Karin Fischer, Ilia Sergachev and Kaveh Najafian share their experience as being a part of an ITN-project, and give good advice to future ITN fellows.

#### Before joining the network

Before joining the network, neither Mike, Karin, Ilia nor Kaveh had any concerns about moving to another country to work and live for the next 2-3 years. They all unanimous agree that the scientific part was the most important part when they applied for a position within the COMIQ network. As Kaveh replies, 'The first priority for me was the research, but the secondments and training events that were advertised certainly helped with making the decision to move'. Karin had previously studied in Zürich so the thought of living in Denmark was not scary to her.

#### Scientific and personal gains

From the scientific perspective all 3 fellows and Mike have learned a lot by being part of the COMIQ network. Mike states, 'One aspect of COMIQ that has been most beneficial is the community. Through the annual meetings, the fellows and Pls have gotten to know one another quite well, fostering an environment conducive to collaboration. Since COMIQ is all about molecular ions, I have also learned a great deal about chemistry through lectures at the COMIQ schools and discussions with the fellows'.

Karin describes her benefits by working within a network of experts. 'Aside from the experience I've gained from working in my lab here in Aarhus, I have also had the opportunity to connect with and learn from the other COMIQ fellows. From a scientific perspective, this means that if one fellow finds a clever solution to a problem, I can learn from it and implement it here. If I have a problem, I have a whole community to which I can reach out and ask for help. From a personal perspective, it means that I have made friends from a variety of backgrounds'. The last part about making new friends, the other fellows strongly agrees with her. Ilia, 'I have acquired new friends from very different countries'.

#### **Current work**

For the 3 ERS' the deadline for submitting their thesis is approaching. Ilia, 'I'm writing a paper about new type of high power quantum cascade lasers; meanwhile prearranging the contents of my PhD thesis'. Mike has continued his work in the Lab at Aarhus University although his post doc position within COMIQ has terminated.

#### Good advice

If they were to give the next generation of ITN-fellows a good advice, they say:

Mike,' It's generally a good idea to know what you're getting into. There will always be surprises, whether they be cultural or administrative, but thoroughly researching these details ahead of time will ensure that most of these surprises will be pleasant.'

Kaveh, 'Enjoy it!'

Karin, 'Be open-minded and not afraid to try new things. On top of that, don't worry too much about it. For all of the differences there are around the world, there are a lot of similarities as well.'

llia, 'I think, one should try to do it right after the university, while he is still quite free from social obligations.'

They will all recommend other student to join an ITN network, if the opportunity presents itself.

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#### A new ESR

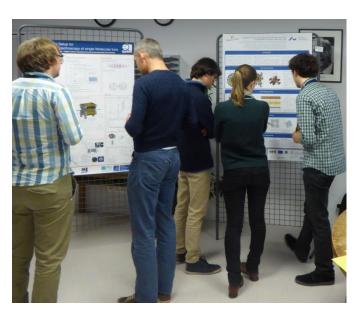
#### Chana Jian Kwona, DUS

Chang Jian Kwong obtained both his masters and bachelor degrees at the National University of Singapore. For his master thesis, he proposed the theoretical application of weak measurement scheme in interferometric settings to reduce the effects of amplitude damping decoherence channel.

Chang is very pleased to work under Prof. Schiller and be a part of the exciting endeavor on high-precision molecular ion spectroscopy by building the required ultra-precise laser systems within the framework of the COMIQ programme.



Chang Jian Kwong



The poster session was a great opportunity to continue the scientific discussions.

#### **Awards**

For the first time in COMIQ history, prizes were awarded to fellows for the best oral presentation and the best poster presentation at the 3<sup>rd</sup> Training Event in Paris. The award committee had a very difficult job deciding on a winner as everyone came well prepared and contributed to the scientific discussions.

<u>Best oral presentations:</u> The Runners Up for the best oral presentations were: Alexander Dörfler from University of Basel and Amir Mahdian from University of Ulm. The winner was Steffen Meyer from Aarhus University.

<u>Best poster presentation:</u> The Runners Up for the best poster presentation were: Jan Heip from PTB and Milán Negyedi from HighFinesse. The winner was Lorenzo Petralia from the University of Oxford.

Congratulations to you all. The winning awards consisted of a certificate and a 100 € prize.

#### **Practical Information**

Important in relation to publications;

- 1. Make sure to acknowledge COMIQ: 'This work was supported by the European Commission under the Seventh Framework Programme FP7 GA 607491 COMIQ.'
- 2. Send the publication to <a href="mailto:anne.cathrine.thorup@phys.au.dk">anne.cathrine.thorup@phys.au.dk</a>

Within the network following mailing lists are available: <a href="mailto:comiq.fellows@maillist.au.dk">comiq.fellows@maillist.au.dk</a> (fellows), <a href="mailto:comiq.genaillist.au.dk">comiq.genaillist.au.dk</a> (fellows & group leaders)

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