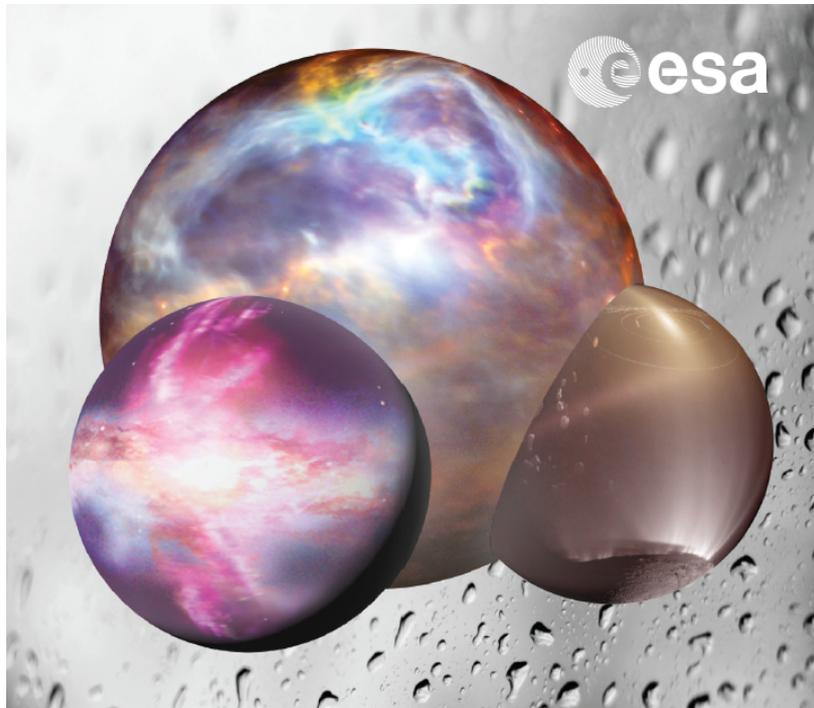


# Water in the Universe: From Clouds to Oceans

## Second Announcement and Call for Abstracts



**→ WATER IN THE UNIVERSE**  
from clouds to oceans

12-15 April 2016  
ESA/ESTEC, Noordwijk, The Netherlands

*The conference will cover all astrophysical aspects of water, including the water trail, from the formation of water in molecular clouds to water on planetary bodies, including in our own solar system; water as a probe of physics and chemistry; and water in nearby to water in extra-galactic and high redshift sources.*

<b>Science Organising Committee</b>	<b>Invited Speakers</b>	<b>Bertrand LeFloch</b>
Yuri Alkawa	Dominique Bockelée-Morvan	Gary Melnick
Ted Bergin	Paola Caselli	David Neufeld
Cecilia Cocarelli	Ilsa Elmehrik	Giovanna Tinetti
Ewine van Dishoeck	Alex Faure	Gerónimo Villanueva
Yu Gao	Eduardo González-Alfonso	Paul van der Werf
Paul Hartogh	Michiel Hogerheijde	
Derek Lis	Sergio Ioppolo	<b>Local Organising Committee</b>
Göran Pilbratt	Agata Karska	Göran Pilbratt
Axel Weiss	Lars Kristensen	Mylène Riechers
		Congrex - ESA Conference Bureau

[www.esa.int](http://www.esa.int) <http://www.congrexprojects.com/2016-events/16A06> European Space Agency

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# Second Announcement and Call for Abstracts

*Issued 29 September 2015, updated 9 October 2015*

## Introduction and Aims

Water consists up of the two most common reactive elements in the Universe. Does it mean it exists everywhere in the Universe? How and where is it formed and destroyed? What roles does it play under different circumstances? Where did Earth's water form and how did it arrive here?

Although atmospheric water vapour constitutes only  $\sim 0.001\%$  of all 'surface' water on Earth, which is but  $\sim 0.02\%$  the total mass of the Earth, it makes ground based astronomical observations of water exceedingly difficult. Space missions have played a key role, and today water has been observed in gaseous and solid form in various environments under a range of physical conditions throughout our solar system, in disks around young stars, in proto-stars, in the interstellar medium in star-forming clouds in our galaxy, and in external galaxies including also in high-redshift galaxies in the early universe.

This meeting will cover all astrophysical aspects of water. Topics are meant to be wide in scope, and include the following broad science areas:

- Formation and destruction of water and its chemistry: theory, laboratory work, and models
- Water excitation and its relation to other ISM tracers
- Water in star formation
- Water in disks and planet formation
- Water in the solar system and exo-solar systems
- Extra-galactic and high-redshift water

The objective of the meeting is to bring together astronomers interested in all astrophysical aspects of water, from the solar system to extra-galactic high-z conditions. The meeting aims to facilitate cross-fertilization between researchers with different observational, experimental, and theoretical backgrounds.

Welcome!

## Meeting Format

The meeting will feature invited presentations, and contributed oral and poster presentations will be solicited from the community in the Second Announcement & Call for Abstracts.

A single plenary session is foreseen for the meeting in order to maximise interaction. There is space for posters close to the lecture hall, ample time will be reserved for extended coffee breaks and poster viewing, and a conference dinner will take place.

## Call for Abstracts

Contributed oral and poster presentations are solicited in the broad science areas listed above:

- **Formation and destruction of water and its chemistry: theory, laboratory work, and models**  
Invited speakers: *Gary Melnick, Sergio Ioppolo, and Paola Caselli*
- **Water excitation and its relation to other ISM tracers**  
Invited speakers: *David Neufeld, Agata Karska and Alex Faure*
- **Water in star formation**  
Invited speakers: *Lars Kristensen and Bertrand LeFloch*
- **Water in disks and planet formation**  
Invited speakers: *Ilse Cleeves and Michiel Hogerheijde*
- **Water in the solar system and exo-solar systems**  
Invited speakers: *Geronimo Villanueva, Dominique Bockelée-Morvan, and Giovanna Tinetti*
- **Extra-galactic and high-redshift water**  
Invited speakers: *Paul van der Werf and Eduardo González-Alfonso*

To submit your abstract go to: <https://www.conftool.pro/16a06/>

The SOC is looking forward to a difficult task of scheduling a large number of contributions describing the exciting scientific progress. The current planning foresees 15-20 minute contributed talks (including discussion).

A single plenary session is foreseen for the meeting, together with round-table discussions in order to maximize interaction. There will be ample time for poster sessions, depending on pressure there will be one or two sets of posters on display for the full or half the duration of the meeting.

All presentations will be posted online after the meeting as PDF documents.

## Calendar of Events

Pre-Announcement	17 December 2014
First Announcement	12 June 2015
Second Announcement & Call for Abstracts	29 September 2015
Registration begins ( <b>updated</b> )	2 November 2015
<b>Abstract submission deadline</b>	<b>11 December 2015</b>
Notification of acceptance	29 January 2016
Preliminary science programme	29 January 2016
Early registration fee ends	5 February 2016
Registration deadline for presenters (oral & poster)	19 February 2016
Final science programme	26 February 2016
Registration ends	8 April 2016
Symposium dates	12-15 April 2016

## **Venue**

The symposium will be held on 12-15 April 2016. The venue will be the ESTEC Conference Centre, Noordwijk, The Netherlands. The maximum capacity of the venue is 250 participants.

The European Space Research and Technology Centre (ESTEC) of the European Space Agency is located in Noordwijk, The Netherlands, a map showing the location and travel directions can be found at [http://www.esa.int/About\\_Us/ESTEC/How\\_to\\_get\\_to\\_ESTEC](http://www.esa.int/About_Us/ESTEC/How_to_get_to_ESTEC)

## **Scientific Organising Committee (SOC)**

The SOC consists of:

Yuri Aikawa, University of Tsukuba, JP  
Ted Bergin, University of Michigan, USA  
Cecilia Ceccarelli, University of Grenoble, F  
Ewine van Dishoeck, Leiden Observatory, NL  
Yu Gao, Purple Mountain Observatory, Nanjing, CN  
Paul Hartogh, MPS, Göttingen, D  
Darek Lis, LERMA, Paris, F  
Göran Pilbratt, ESA/ESTEC, Noordwijk, NL  
Axel Weiss, MPIfR, Bonn, D

## **Local Organising Committee (LOC)**

The LOC consists of:

Göran Pilbratt  
Mylène Riemens  
Congrex - ESA Conference Bureau

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