# 16th Reinventing Space Conference (RISpace 2018)



## **Abstract Title**

Author's Name Author's Affiliation/Company Author's Address; Author's Phone Number Author's Email

# **ABSTRACT GUIDELINES**

The abstract should stand alone as a summary of the paper, not as an introduction. Indicate the subjects dealt with and state the objectives of the investigation. Explain how your subject relates to affordable and responsive space missions. Readers should not have to read the paper to understand the abstract.

# **Topics**

The focus of the 2018 conference will be on the novel applications that are becoming commercially viable as space technology improves. These include space tugs; space tourism; satellite refuelling; debris removal; debris exploitation; manufacturing in orbit; real-time video from space; space mining; etc.

We also anticipate animated discussion on "The Norms of Behaviour in Space", which are becoming increasingly important as we move towards the era of mega-constellation, the need for Space Traffic Control, and hence the requirement for significantly enhanced space situation awareness.

Bearing this mission statement in mind, papers are invited for topics including:-

Near Earth Activities Papers are invited on the new services and commercial opportunities that are under-development for our Near Earth Environment. From mega-constellations that will deliver global high-speed internet to on-orbit servicing and commercial debris removal missions, commercial expansion of our Near Earth Environment has great potential over the upcoming years.

Access to Space Papers are invited on the new vehicles, technologies and operational concepts that are radically reducing the cost to reach orbit. Small launchers, reusability and commercial rideshare partnerships, all promise to open up the space frontier and will be the focus of this session.

Enabling Technologies Fundamental to a number of the new commercial opportunities are technology breakthroughs. Laser communications, cubesat propulsion, solar sails, on-board advanced data processing all promise to deliver enhance the performance of the next generation satellites.

Commercialisation and Applications As important as the technology which is driving the development of space, are the new and innovative business plans which are being adopted by new and established space companies. This session invites papers from new start-ups, companies with a bold new commercial vision and those with new market predictions/forecasts.

Beyond Earth Orbit This session will explore the plans to expand beyond Earth orbit, both for exploration and exploitation of new resources. Resources from the moon, Mars and Near Earth Asteroids all have great promise for the terrestrial economy and space propulsion, but what are the stepping stones to achieve this? Prospecting missions, commercial prizes, institutional partnerships, are all of interest.

Payload and platform technologies

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Previous conferences have also addressed the following:

#### International programmes and cooperation

How do we find ways to work together to make things happen?

#### New ways of doing business in space

How do we make money on affordable and responsive space missions?

## **Tactical space systems**

How do we best serve the needs of military or civilian missions, and the needs of emergency responders?

# Low-cost interplanetary missions

Can we use the new technology to create dramatically lower cost interplanetary missions?

## Ways to dramatically reduce space system and launch cost and schedule

What are the methods, processes and technologies we can use to make major reductions in cost?

### New application areas for low-cost space systems

What are the new applications that can take advantage of newer, much-lower-cost systems?

#### **Education and motivation**

How can RISpace educate and motivate the coming generation, without whom there is no space programme?

#### **Abstract Submittal**

Please submit abstracts for RISpace 2018 of up to 500 words in PDF or MS Word to Stuart Eves at papers@rispace.org.