



## DLR Magazine 133 - 'Rumble in the jungle'

12 April 2012

The cover of DLR Magazine issue 133 shows the Soyuz launch facility and a launcher being prepared for lift-off at Europe's Spaceport in French Guiana. The Soyuz is carrying the first two satellites for the Galileo global satellite navigation system – Europe's independent navigation system, which will comprise a total of 30 satellites when completed. The feature 'Rumble in the jungle' gives readers an introduction to the multi-launcher space centre at the edge of the tropical rain forest in South America and new insights into Europe's fascinating gateway to space.

Various other topics are included in the latest edition of DLR Magazine. The article entitled 'Legendary heroes and Roman priestesses' describes how planetary researchers are working their way through many volumes of The Thousand and One Nights, history books and archives to find names for the cosmic craters, mountains and valleys that they are discovering in the course of their work.

'Watching whales for better flight' reveals what DLR researchers are learning from 30-ton humpback whales, and how they have, through the study of marine mammals, achieved a significant breakthrough in increasing the manoeuvrability of helicopters. Scientists at the DLR Institute for Aeroelasticity in Göttingen are researching dynamic flow properties on rotor blades through trials in a wind tunnel. They are basing their work on the geometry of the whale fins, which gives these creatures their remarkable agility and speed.

Getting passionate about something that you cannot see – on page 24 of this magazine, the subject changes to those invisible all-rounders known as nanoparticles. Researchers at the DLR Institute of Composite Structures and Adaptive Systems are imbuing these minute particles with properties that they are able to release under defined conditions. Whether in medicine, building technology, chemistry or, as at DLR Braunschweig, in the aircraft and automotive sector – these little 'nanos' are on their way to becoming the 'next big thing'.

The DLR Magazine 'Portrait' section profiles Daniela Heine, a talented young researcher. This 25-year old physicist at the DLR Institute of Aerodynamics and Flow Technology is investigating the behaviour of pressure waves in railway tunnels and their effect on high-speed trains such as the ICE, using the globally-unique tunnel simulation facility at DLR Göttingen.

You can read the DLR Magazine online here, free of charge.

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