Japan astronaut solves bubble puzzle

April 15 2010

Of all the experiments Japanese astronaut Naoko Yamazaki has carried out in space -- making sushi in a kimono and playing a harp -- blowing soap bubbles has arguably brought the biggest breakthrough.

Yamazaki, Japan's second female astronaut and its first mum-in-space, is part of the crew that joined a team on the International Space Station (ISS) last week in the latest mission for US space shuttle Discovery.

The trip put more women in orbit than ever before on a mission to deliver nearly eight tonnes of cargo, including spare bunks for the space station occupants, a tank of ammonia coolant and scientific instruments.

But mission specialist Yamazaki had her own agenda after promising her daughter she would solve a mystery puzzling the sharp-minded seven-year-old: why coloured bubblebath makes colourless soap bubbles in water.

Yamazaki on Wednesday mixed red tropical fruit juice with soap and blew shiny red bubbles in space to the delight of her daughter Yuki, who watched with the astronaut's husband Taichi on a video phone, Jiji Press said.

The experiment worked because space's zero-gravity environment allowed colour pigments to spread evenly around a bubble, said Yamazaki's husband.

The latest experiment follows a tradition of Japanese astronauts testing

left-field ideas in space, ranging from trying out a flying carpet to applications of eye drops.

(c) 2010 AFP