ASTRO

THE PARTNER SCHOOL SCIENCE PROGRAM

THE FIRST MEET AND GREET VIDEOCONFERENCE

By Selin Aktas, Sisli Doga College (Istanbul, Turkey)

We experienced the Meet and Greet video conference with Children's World Academy (Quebec, Canada) on November 8^{th} , 2013. It was great that our students and teachers met with the Partner School's students







and teachers. At first, one of our students stood up, introduced himself, and called his partner's name. His partner came up and introduced himself too. Every student and their partners repeated the action. They asked interesting questions to each other. One of our students named







Kuzay told her partner Maya that her mail was very impressive. Kuzay then asked Maya what her favorite food is. She answered, and asked Kuzay the same question. Kuzay said his favorite food is Turkish Sis Kebap. This was quite important for the acculturation. Other children wanted to learn from each other what were their favorite subjects at school, what they did in their spare time, what was their favorite planet, etc. When it came to spare time activities, most of thse students said they enjoyed soccer. For favorite subjects, they said mathematics,



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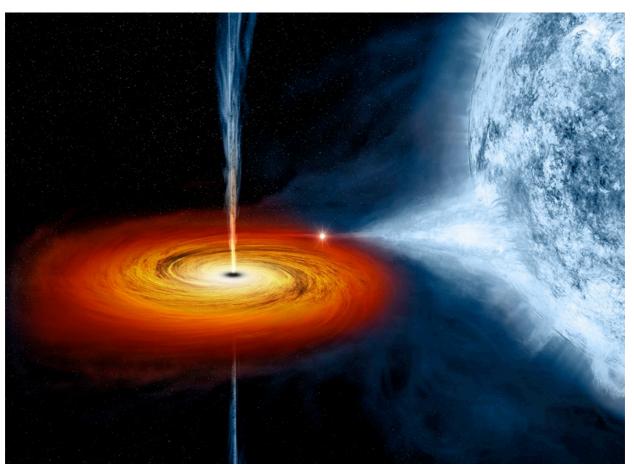
science and physical education. When it came to favorite planets, we heard entertaining answers. One student said he liked Saturn because of the rings. Another student, Edip Efe, said his favorite planet is Kepler 22B because it resembles the Earth. They asked each other about travelling and what countries they had visited. Sometimes there were funny misunderstandings. One of them was that when we said 'Why', they thought we said 'Bye'.

Overall, it was a very entertaining and beneficial videoconference for us all.



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Heavy Black Hole Jets in 4U1630-47
Illustration Credit: NASA, CXC, M. Weiss

What are black hole jets made of? Many black holes in stellar systems are surely surrounded by disks of gas and plasma gravitationally pulled from a close binary star companion. Some of this material, after approaching the black hole, ends up being expelled from the star system in powerful jets emanating from the poles of the spinning black hole. Recent evidence indicates that these jets are composed not only electrons and protons, but also the nuclei of heavy elements such as iron and nickel. The discovery was made in system 4U1630-47 using CSIRO's Compact Array of radio telescopes in eastern Australia, and the European Space Agency's Earth-orbiting XMM-Newton satellite. The 4U1630-47 star system is depicted above in an artist's illustration, with a large blue star on the right and jets emanating from a black hole in the center of the accretion disc on the left. Although the 4U1630-47 star

<u>system</u> is thought to contain only a small <u>black hole</u> -- a few times the mass of our Sun -- the implications of the results may be larger: that <u>black holes</u> of larger sizes might also be emitting jets of massive nuclei into the cosmos.