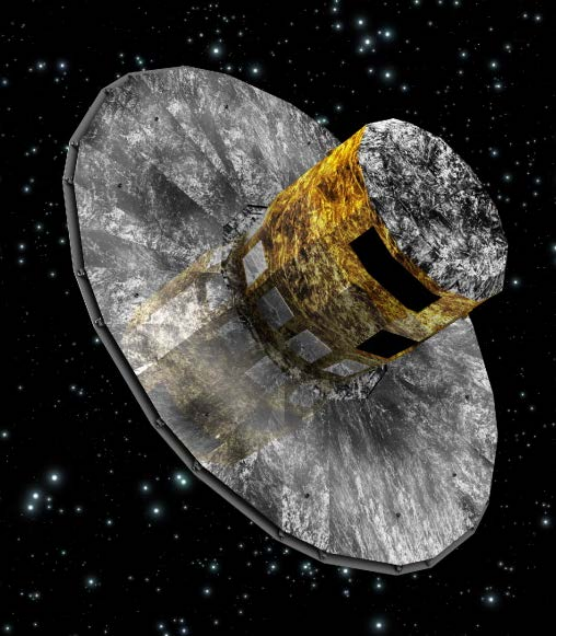

Gaia science discoveries tools and ideas to introduce learning through discovery

Cambridge UK Gaia science alerts discovery activity

http://gaia.ac.uk

Gaia is the European space mission which will tell us, for the first time, where the stars are in our Milky Way Galaxy

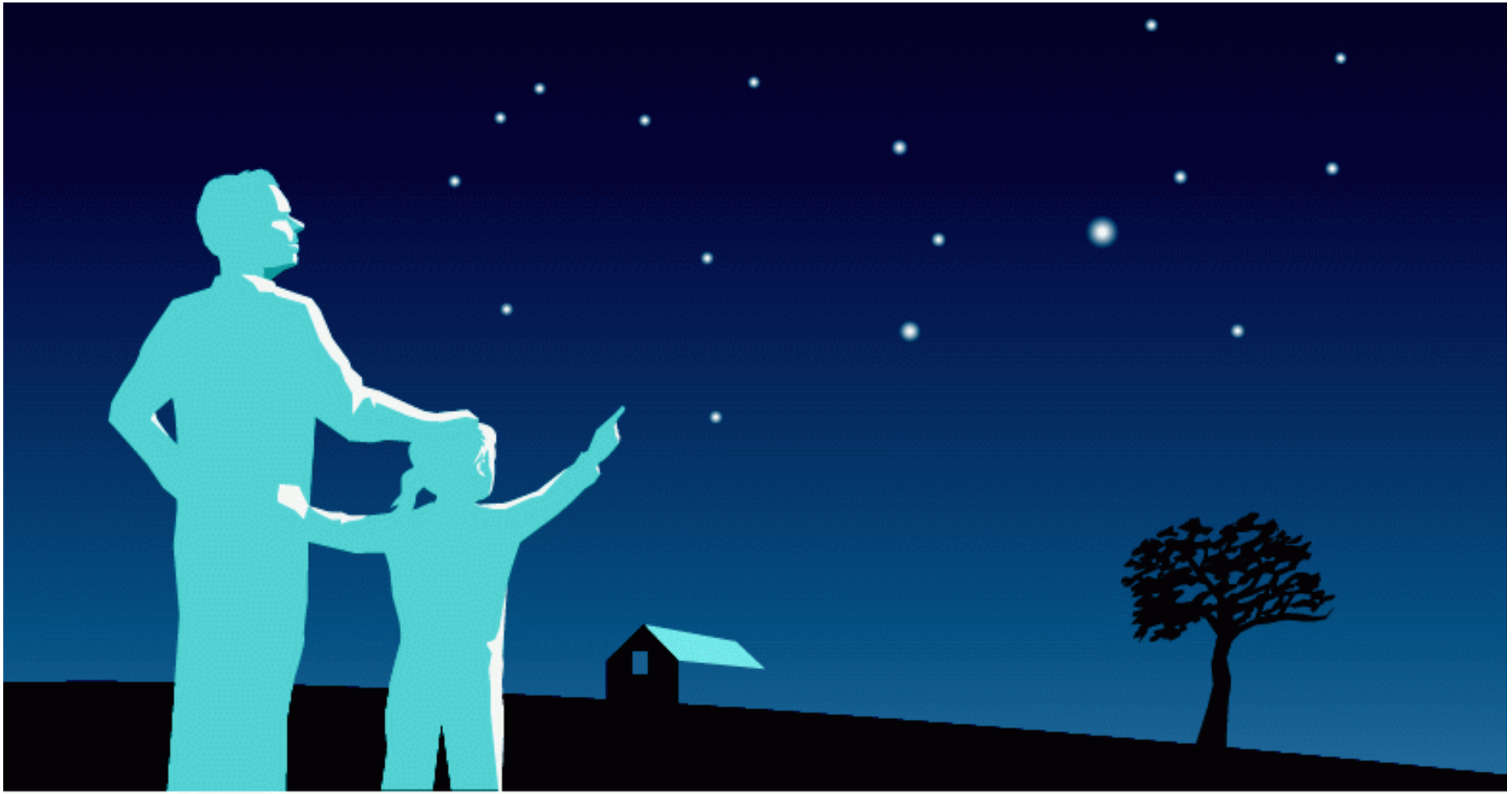

Figure 2a. ***Twinkle, twinkle, little star,*** *how I wonder where you are...*

gaia.ac.uk/ science discoveries

- The contribution by the University of Cambridge (UCAM) team to the Discover the Cosmos (DtC) programme has been centred around the revolutionary upcoming Gaia space mission. Cambridge's role in the Gaia mission, from initial conception through planning and implementation, and processing the data, uniquely positions us to provide an inside view of the project and its science.

- For DtC, UCAM has developed a stable long-term online platform to provide public access to the Gaia Science Alerts at the same time as they are released to the professional community. The site will also ensure the legacy availability of DtC resources. The Alerts will publish variable and transient objects as soon as they are detected by Gaia. Our platform is currently in the implementation phase: it will contain a significant repository of fun and informative Gaia educational material and be available at http://gaia.ac.uk when Gaia is launched in late December 2013.
- see, for example, the Gaia animations we are developing to introduce Gaia science
- http://www.youtube.com/watch?v=cot680thsdQ
- http://www.youtube.com/watch?v=h_fjlec5Wqs
- see also (in pictures below) the models UCAM has acquired for public displays on Open Days and PR events around the UK. These models are used very successfully by our Post Docs working with children and giving talks in local schools (primary, secondary and also sixth form colleges). They have been extremely popular with viewers of all ages, and will be for years to come.

http://gaia.ac.uk science discoveries

- The site will provide at-a-glance access to the latest Gaia transients and will facilitate cooperative observing programmes with UK (Faulkes and Liverpool) and international robotic telescope facilities to aid with the final identification of the transient objects.

Our Science Alerts platform will be equally useful in the classroom and for amateur observers who wish to carry out their own follow-up observations.

The site will allow these observations to be uploaded, and so contribute to full scientific analyses, with due credit to the school observers.

Gaia is launched in 11/2013, and we anticipate the full easy-to-use discoveries system will be on-line in late summer 2014.

http://www.esa.int/Our_Activities/Space_Science/Gaia has more information on the Gaia mission.

What does Gaia look like?

Make your own Gaia!

Gaia models to show how space telescopes work