The Milky Way

The Milky Way is a spectacular phenomenon in the night sky if you are lucky enough to observe it. Not visible in light-polluted skies, it must have been awe-inspiring to prehistoric or early historic peoples whose cultures referenced it. Despite this it was not until 1610 that Galileo discovered that this luminous, broad milky-looking band was actually made up of faint individual stars. The spectacle of the galaxy's 100 billion stars and 100,000 light year diameter is for many people a first introduction to the dizzying scale of the universe but it is only to our eyes that they look so crowded. Two important first magnitude red stars, Aldebaran (Alpha Taurus) and Antares (Alpha Scorpio) are almost exactly opposite each other in the constellations of Taurus and Scorpio, marking the doorways to the Milky Way. Their position therefore determines the best times for viewing it: the prominent stars in Orion, Taurus, Gemini, Canis Major and Minor accompany the Milky Way during winter in the northern hemisphere, and those in Scorpius and the “Summer Triangle” (Vega, Aquila and Deneb) are connected with the appearance of the Milky Way dividing the sky during summer. Viewed from more southern latitudes, the bulge at the centre of the galaxy in Sagittarius marks the Milky Way at its brightest. Continuing south from the central bulge, bright Alpha and Beta Centauri and the stars in the Southern Cross (Crux) contrast with the surrounding dark clouds. Part of the magic of the Milky Way lies in its shape-shifting properties as it moves along the horizon throughout the night and throughout the seasons. Depending on one’s location, during parts of the night the band of light might lay across the horizon and during other times rise vertically across the sky: the Milky Way “tumbles” across the sky throughout the year (Aveni 2019).

The Milky Way has been referenced in twentieth century western culture, though not necessarily because of its stellar properties. It was the name of a 1969 surrealist film directed by Luis Buñuel in which it was represented as being the Way of St. James, a pilgrimage route towards Santiago de Compostela in northwest Spain. It is described as “something quite peculiar, something shimmering and white”, in the song “Under the Milky Way”, penned in 1988 by the Australian rock band The Church. This is just one of multiple songs that have referenced the Milky Way galaxy in verse over recent years. Of course many of us in Britain will be familiar with the popular chocolate bar called “Milky Way” and its spin-off “Milky Way Magic Stars”. Other countries have different variants of these confections but they still carry the tag “Milky Way”. These “modern” references do acknowledge the spectacular image the Milky Way presents in the sky but to many early and indigenous peoples it also helped shape their culture, stories and worldviews. For a
wider picture, including theoretical and methodological concerns, we have asked some experts to share their insights and we hope you enjoy the following contributions.

References