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The background of the entire cover is a deep blue space scene. It features a bright, glowing nebula or comet tail in the center, a large planet on the left, and a bright star or planet in the upper left. The overall aesthetic is futuristic and cosmic.

the PLANETS

SIMON RATTLE **BERLINER PHILHARMONIKER**

Colin Matthews *Pluto – The Renewer*
World Premiere Recording of *Asteroids* by
Kaija Saariaho · Matthias Pintscher
Mark-Anthony Turnage · Brett Dean

I only ever conducted *The Planets* with British orchestras until this *Ad astra* project. But coming back to it after a period of 20 years having not conducted it, I'm more and more impressed and moved by the piece. It's very European. What is English about it, which is "Jupiter," is very distinctly in inverted commas. It's like a nostalgic look back at an England that never existed – the England of cricket fields and warm beer and bad cooking. More seriously, it was written during the First World War, trying to make sense of what happened. Will the world ever be the same again? And the answer is that it never can be: with "Neptune," Holst composed an ethereal oblivion.

I think the success of *The Planets* horrified Holst, because he thought there was some wonderful music in it, and he thought there were things he could have done much better. What he would not notice, as a very self-critical man, was what an extraordinary master of the orchestra he was, and how little it sounded like anybody else's orchestra. There are all sorts of discoveries, all kinds of sounds that had not been heard before. It's not Holst's fault that every film composer took it as their toolbox, and stole shamelessly. Now that it's out of copyright they don't even bother to change the notes.

Holst never did anything like it again; he went to another place. But it has affected generations of composers. So when EMI asked me to record *The Planets* for a second time, I knew that Colin Matthews had already written an extraordinary *Pluto*, mixing Holst's gestures and harmonies and his own music together. And I thought, let us simply open it out. So we commissioned works from four composers who have worked with the Berliner Philharmoniker, to make a suite of pieces that would be like a calling card for the orchestra.

Matthias Pintscher, Mark-Anthony Turnage, Brett Dean, and Kaija Saariaho have all had their own close and emotional relationship to *The Planets*. They have taken a modern, profound, rather tragic view of space, and Holst's original now seems ever more contemporary alongside their musical asteroids. All the music in this *Ad astra* project asks the question, what can music make of what is out there? We are thrilled to be presenting it.

Sir Simon Rattle



Compact Disc 1

57.24

Gustav Holst 1874–1934

The Planets Op.32

Suite for large orchestra

1	Mars, the Bringer of War	7.25
2	Venus, the Bringer of Peace	8.59
3	Mercury, the Winged Messenger	4.02
4	Jupiter, the Bringer of Jollity	8.02
5	Saturn, the Bringer of Old Age	9.35
6	Uranus, the Magician	6.04
7	Neptune, the Mystic	7.02

Colin Matthews b1946

8	Pluto, the Renewer	6.12
	<i>Dedicated to the memory of Imogen Holst</i>	

Compact Disc 2

37.27

Kaija Saariaho b1952

1	Asteroid 4179: Toutatis	4.36
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Matthias Pintscher b1971

2	towards Osiris	7.55
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Mark-Anthony Turnage b1960

3	Ceres	6.40
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Brett Dean b1961

- 4 Komarov's Fall 7.49
In memory of Vladimir Mikhailovich Komarov (Soviet cosmonaut 1927–1967)

Enhanced Element

- 5 *The Making of The Planets and Asteroids* directed by Paul Bates 10.26

Rundfunkchor Berlin (women's voices, CD1 tracks 7 and 8)

Chorus master for this production Robin Gritton

Chief conductor Simon Halsey

Berliner Philharmoniker

Sir Simon Rattle

Asteroids by Saariaho, Pintscher, Turnage, and Dean commissioned by the Berliner Philharmoniker

Recorded in concert: March 15–18, 2006, Philharmonie, Berlin

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Ad astra: composers in space

In the 1960s, American astronomers established that, at the end of the 1970s, the major planets in our solar system (Jupiter, Saturn, Uranus, and Neptune) would be positioned in such a way that it would be possible for a single space probe to reach each one of them in succession. Of the two NASA probes Voyager 1 and Voyager 2, launched from Cape Canaveral on August 20 and September 5 respectively, Voyager 2 did in fact reach all four planets between 1979 and 1989. On board each probe was a gold disc entitled “Sounds of Earth” comprising, in addition to greetings and images, recordings of the sounds and music of our planet, including various works by Johann Sebastian Bach.

Music as a means of intergalactic communication? The gold discs carried on the Voyager missions don't just underline the opinion of at least part of the earth's population that certain achievements of (Western) civilization can be considered representative of mankind as a whole; they also express the hope that these terrestrial “signals” might really be picked up somewhere in the cosmos by recipients capable of decoding them. In any event, belief in music as a universal, cosmic language dates back to antiquity.

In the 6th century BC, Pythagoras was already teaching the mathematical ratios underlying musical intervals in the conviction that the motions of the human soul and of the cosmos were based on the same harmonious mathematical proportions. He believed that the friction of the various planetary motions gave rise to a music of the spheres which, though not perceptible to the human ear, is reflected in music. Thus, for the Greeks, music did not only reflect the cosmic order, it also conversely had a direct working on men's psyches and personalities.

The Baroque astronomer Johannes Kepler was still working within the same tradition. In the fifth book of his *Harmonices mundi* of 1619, he calculated tonal relations for the six planets discovered by then which express themselves in the harmony of a “symphony of the worlds.” Kepler did not know about Uranus and Pluto, the only two planets in our solar system not visible from earth to the naked eye; it was not until 1781 that William Herschel spotted Uranus using a reflecting telescope of his own manufacture. Pluto, the outermost and smallest known planet, was sighted in 1930 by the American astronomer Clyde W. Tombaugh.

Gustav Holst thus learned four years before he died that his seven-part suite for orchestra, *The Planets* Op.32, was in fact incomplete

without Pluto, though he probably didn't for a moment consider composing another movement. He had always maintained a certain skepticism with regard to the runaway success that his work had enjoyed since its premiere in 1918, and his erstwhile passionate interest in astrology had long since burned itself out. At the time of the suite's composition, however, when Einstein's theory of relativity was setting new challenges for the sciences, philosophy, and the arts, Holst discovered a penchant for the more metaphysical aspects of the heavenly bodies — as did some of his fellow-composers. Charles Ives, for example, followed the American Transcendentalists in harking back to the notion of a music of the spheres, while Arnold Schoenberg's *Second String Quartet* (the final movement of which is a setting for soprano solo of the poem "Entrückung" by Stefan George, a member of the so-called "Kosmische Runde") breathes "the air of another planet."

Along with the orchestral works of Stravinsky, Debussy, and Ravel, it was Schoenberg's *Five Orchestral Pieces* Op.16 that particularly increased Holst's receptiveness to a new, large-scale sonority. His suite *The Planets* thus includes orchestral effects that were still unusual for British music at that time. In seven characteristic movements, Holst, an English composer of Scandinavian-Baltic origin, presents the seven planets known to him (he

omits the Earth) — though not in their actual sequence. His musical journey through space leads from Mars first to the "inner" planets of Venus and Mercury, and then to the "outer" planets Jupiter, Saturn, Uranus, and Neptune. This sequence corresponds to the seven ages of man (from childhood to old age) that are part of astrological thinking. According to his daughter Imogen, Holst derived his amateur knowledge of astrology primarily from Alan Leo (alias William Frederick Allan), who had published several popular books on the subject in the years before the First World War. Leo drew Holst's attention to the particular characters of the planets reflected in the titles and musical expression of the seven movements, and also to alleged influence of the celestial bodies on human beings.

The rhythmic energy of "Mars, the Bringer of War" suggests that this movement represents Holst's reaction to the outbreak of the First World War, but he had already completed the sketch for it in July 1914. He was therefore preoccupied less with war than with introducing a new soundworld, which he achieves by means of the hard, *col legno* playing of the strings at the beginning, the tonal progressions on the horn, and the sharp contrasts of key, for example. Leo described people born under the influence of Mars as obstinate, forceful, and brusque — in complete contrast to Venusians

who, according to him, were well-balanced and strove after all that is beautiful.

In keeping with her title, "Venus, the Bringer of Peace" thus stands in complete contrast to her predecessor; calm, transparent passages with soft, iridescent chords on the flutes and harps anticipate the sense of infinity in "Neptune." After this slow movement, "Mercury, the Winged Messenger" resembles a Classical scherzo, light and airy in its quicksilver interplay between the strings and woodwind. Holst himself once remarked that Mercury symbolized the intellect, and a folk-like melody for solo violin gradually permeates the whole orchestra in an appropriately intelligent manner.

Melodic ideas come thicker and faster and the instrumentation becomes richer in the lively and cheerful fourth movement, "Jupiter, the Bringer of Jollity." It is unlikely that in this "other-worldly" suite Holst conceived the striking melody that he later reworked for unison choir and orchestra as a setting for Cecil Spring-Rice's "I vow to thee, my country" as the national song which, for many years, brought the British public to its feet. On the character of "Saturn, the Bringer of Old Age," the composer remarked that Saturn brought not only physical decay but also a vision of fulfillment. This relentlessly advancing movement is a reworking of the choral piece *Dirge and Hymeneal*, which Holst had composed a little

while previously to a text by Thomas Lovell Beddoes. In the title "Uranus, the Magician," Holst was probably alluding to the occultism that can affect people born under this star, but also to himself — according to Malcolm MacDonald, the composer's name, Gustav Holst, is hidden behind the striking four-note motif (G–E-flat–A–B-natural). Gustav Holst, an earthly magician?

Finally, "Neptune, the Mystic" is the only title that Holst took directly from Leo's book *What Is a Horoscope?*, which attributes to this star sign sensitivity and mysteriousness. This planet seems to look out into the infinity of the universe, like mankind itself. The movement is played *pianissimo* throughout and achieves its unique atmosphere by means of the instrumental writing, but especially by means of the rippling harp figures, the celesta, and the sustained high notes in the strings. It ends with a wordless melody sung by an off-stage women's choir, which seems slowly to melt away.

"How could I begin again, after the music has completely faded away as if into outer space?" the British composer Colin Matthews asked himself.

It quickly became clear that it would be pointless to write a movement that was even more remote than Neptune unless the whole orchestra were to join the chorus off-stage. Nor did I feel that I should rely on the astrological significance of Pluto,

which is more than a little ambiguous... The only possible way to carry on from where Neptune leaves off is not to make a break at all, and so *Pluto* begins before *Neptune* has quite faded. And it is very fast — faster even than *Mercury*: solar winds were my starting point. The movement soon took on an identity of its own, following a path which I seemed to be simply allowing to proceed as it would. In the process I came perhaps closer to Holst than I had expected, although at no point did I think to write pastiche. At the end the music disappears, almost as if *Neptune* had been quietly continuing in the background.

STEFANIE WÖRDEMANN
Translation: Sue Baxter

Asteroids

I first became interested in **Toutatis** when reading that it is the asteroid whose orbit passes closest to Earth.

When reading more and then seeing pictures of it, I started to find its unusual shape and complex rotation interesting — different areas of it rotate at different speeds. One consequence of this is that Toutatis does not have a fixed north pole like the Earth; instead, its north pole wanders along a curved path on the surface roughly every 5.4 days. “The stars viewed from Toutatis wouldn’t repeatedly follow

circular paths, but would crisscross the sky, never following the same path twice.

“So Toutatis doesn’t have anything you could call a ‘day.’ Its rotation is the result of two different types of motion with periods of 5.4 and 7.3 Earth days that combine in such a way that Toutatis’s orientation with respect to the solar system never repeats.” (Prof. Scott Hudson, Washington State University)

All these peculiarities, and the fact that Toutatis already has had many collisions with other heavenly objects, inspired me to write this small work to complete the project that Simon Rattle and the Berliner Philharmoniker created around *The Planets* of Holst.

KAJA SAARIAHO

During the initial stages of conceiving an orchestral piece that would eventually bear the title **towards Osiris**, I came across a work of Joseph Beuys from the 1970s which shows individual objects (pasteboard sewing patterns originally created for his sculpture *Felt Suit*) strewn in a free rhythmic sequence and mounted on a blank, untreated screen. Beyond the direct impression made upon me by this work, called *Osiris* by Beuys, it also inspired me to explore the Osiris myth and to trace its significance over the centuries.

It was the destiny of Osiris, the Egyptian

fertility god, son of the sky goddess Nut and the earth god Geb, which became the focal point of my investigations. I derived a formal structure consisting of various stages of fragmentation and reanimation: the initial state of wholeness, the disintegration into separate parts, and their reassembly and metamorphosis — a genuinely musical process.

towards Osiris is to be understood as an independent orchestral study, the first composed materials of a larger work to be developed later and premiered in 2008 in Chicago under Pierre Boulez. As an amplification of the *Ad astra* project and quite independent of my preoccupation with Osiris, I should like to quote Galileo Galilei:

Let no one believe that in order to grasp the lofty concepts written in that book of the heavens it suffices to perceive the splendor of the sun and the stars and to observe their rising and setting: For all of that is evident to the eyes of animals and the vulgar masses. Within its pages are concealed mysteries so profound and concepts so sublime that the labors and vigils of hundreds upon hundreds of the most acute minds have still not succeeded in penetrating them completely, even after thousands of years of investigation. So it is that what presents itself to the mere sense of sight is as nothing in comparison with the marvels that the intellection of learned men discovers in the heavens.

MATTHIAS PINTSCHER
Translation: Richard Evidon

I was inspired to write **Ceres** after reading Bill Bryson’s *A Short History of Nearly Everything*. Ceres was one of the first asteroids to be discovered. I took the idea of asteroids being rocky objects, all of which are capable of colliding with the earth and all of which are moving at slightly different courses through the sky at different rates. There are possibly two thousand asteroids big enough to imperil civilized existence. Even a small asteroid the size of a house could destroy a city (paraphrased from pages 241–43 of Bill Bryson’s book).

The idea of the piece is that different blocks of material (the first two a tune with florid clarinet accompaniment and then a syncopated trombone idea) gradually collide into a dense climactic section, then split apart. I was very attracted to the doomsday aspect of asteroids and the idea that the earth could be destroyed by one any day. Maybe this was affected by my strict religious upbringing that in the book of Revelation warned of Armageddon and the destruction of an evil world. I have added another two asteroids to *Ceres* to make a set (*Juno* and *Torino scale*) commissioned by the Bamberg Symphony Orchestra and Jonathan Nott.

MARK-ANTHONY TURNAGE

Komarov's Fall is written in memory of the Soviet cosmonaut, Vladimir Mikhailovich Komarov, who died upon re-entry to the earth's atmosphere in his Soyuz I spacecraft in 1967. He was the first person to die in space and, significantly, a major casualty of the political mongering that so characterized the international space race in the 1960s.

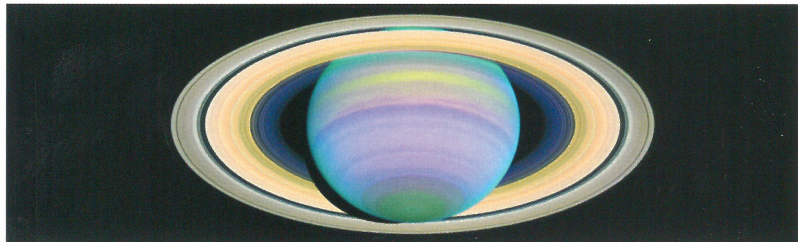
As I began work on this commission, the initial sonic inspiration for my "asteroid" came via the eerie, lonely beauty to be found in recordings of space telemetry signals, but chancing upon a vivid archival recording of Komarov's frantic discussions with the control center from on board his craft further informed the dramatic urgency of the work, especially in

the jagged, semiquaver rhythms that appear throughout, and first heard on woodblocks in the opening pages of the score. (Persistent rumors state that Komarov died cursing the mismanagement of the spacecraft designers and flight controllers.)

Komarov's wife, Valentina, was invited to speak to her husband from the control center and it is their imagined farewell, in the midst of the drama of Komarov's precarious situation, which inhabits the brief lyrical section in the middle of the piece.

The asteroid "1836 Komarov," discovered in 1971, was named in his honor by the International Astronomical Union.

BRETT DEAN



Saturn and its rings from the Hubble telescope in space

Photo: NASA and E. Karkoschka
(University of Arizona)



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