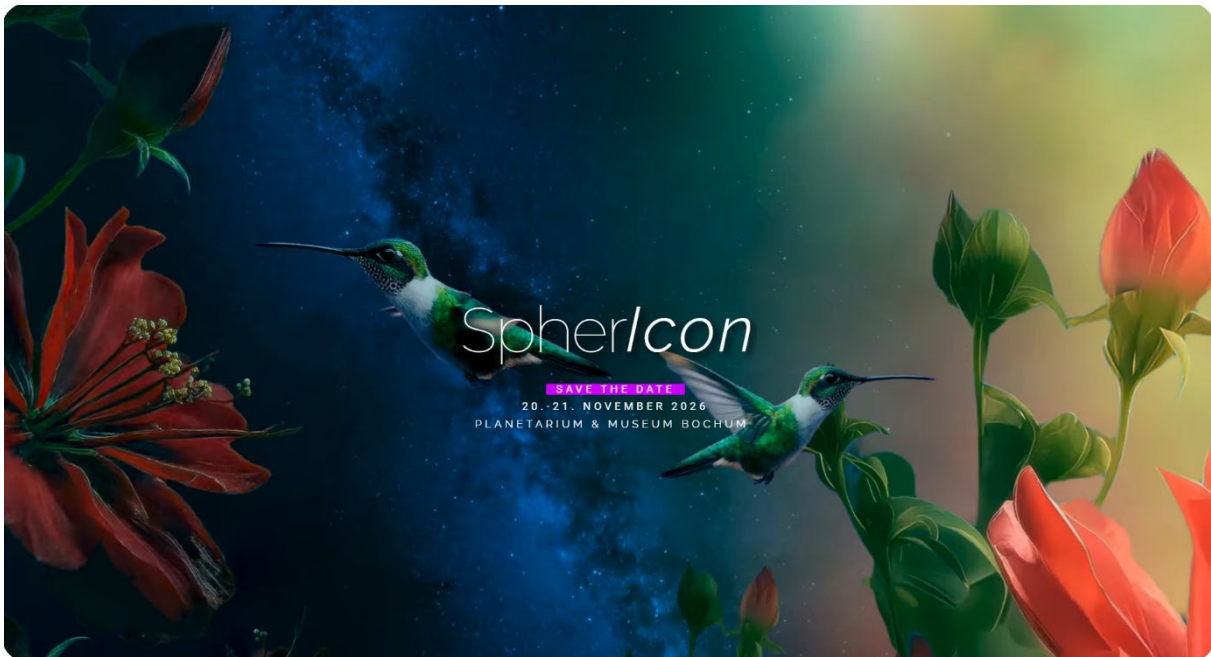




SpherIcon.one – The True and the Beautiful

Why stage cultural live events in a planetarium, some of which require considerable effort and resources?

In Bochum, such events are possible only because we have fortunately been able to allocate a modest budget to them—and because we have exceptionally capable colleagues.

In an age in which information alone is universally accessible, I believe it is safe to say that visitors do not come merely for information. They come for something more—something that may even have archaic resonances. Like the generations before us, we seek to create moments and situations in which we can connect with the great cosmic story and locate ourselves within it.

Humanity's cultural engagement with the cosmos predates the history of civilization and therefore has far deeper roots than the scientific, measurement-based approach. This dimension becomes particularly apparent in cultural live events, which can give rise to shared experiences ranging from the meditative to the ecstatic.

In philosophical terms, one might say that art can bring forth aspects of our relationship with the cosmos for which science has no language.

On a purely practical level, partnerships with renowned institutions such as the Dresdner Sinfoniker and the ZKM - Center for Art and Media in Karlsruhe, as well as with regional institutions such as Schauspielhaus Bochum and Kunstmuseum Bochum, enhance our standing within the region. On another level, these partnerships gradually shape public perceptions of the planetarium, establishing it as a culturally relevant institution.

As someone who has curated the program of the DIVE Festival for Immersive Arts since 2019, I have the impression that an extraordinary amount has happened in this field, particularly over the past two years. One of our motivations is therefore to keep the planetarium receptive to the creative potential currently emerging—both technologically and conceptually—in the field of shared immersive experiences, to participate actively in these developments, and to help shape them.

The renewed interest among artists, creative practitioners, and developers in shared immersive experiences—which now exist in many forms outside planetariums as well, such as former industrial halls transformed by 360-degree presentations of Monet, Klimt, and others—is probably also connected to the emergence of new LED display technologies.

As these technologies continue to improve, and LED technologies in particular, such experiences are becoming increasingly impressive. In some respects, they may even be better suited to creating shared immersive content than the conditions in many planetariums currently allow.

This is another reason why we must not allow ourselves to be overtaken by these developments and passively lose the audiences who come to the planetarium precisely for its immersive experience. Instead, we need to take part in this evolution, help shape it through dialogue with our international colleagues, and ensure that the planetarium is perceived publicly as an active participant in the field.

Our conception of the planetarium as a place that offers not only a science education program but also a cultural program that supports and complements it is fairly distinctive within Germany, Central Europe, and the German-speaking world more broadly.

This begins, for example, with our hour-long shows, which are unusually long by international standards but can be presented here and are frequently expected by our audiences. This differs from the model of the planetarium as an exhibit that visitors pass through, offering brief, automated, twenty-five-minute shows as part of a science center or hands-on laboratory—a model more commonly found elsewhere, including in parts of Asia and the United States.

It is this approach that gives planetariums in the German-speaking world—where they pursue it—a certain cultural gravitas. It also leads both the general public and political decision-makers to assess them differently: as places of cultural relevance.

This is particularly important now that the fulldome hype is noticeably coming to an end after some twenty years. Not least because of LED panel technology, we must assume that all kinds of immersive experiences will emerge over the coming years, quite literally all around planetariums. It is therefore essential that the planetarium not be perceived merely as a “glorified classroom with a fancy overhead projector”—an image evoked when former U.S. presidential candidate John McCain notoriously referred to a planetarium projection system simply as an “overhead projector.”

Fortunately, a substantial portion of our audience now regards the planetarium theater as a regular destination. These visitors have discovered that it is worthwhile to check the program from time to time to see whether something interesting has appeared again. This is due to the wide range of experiences we offer, many of which extend well beyond what might be described as our core mission.

At least, they appear to extend beyond it.

In fact, these programs are not an add-on; they are an organic extension. Educational programs on the one hand and entertainment, art, and cultural programs on the other are not separate worlds existing in parallel.

Even when we speak of genuinely “hard” science communication—in the sense that it should be as factually accurate and “neutral” as possible—it inevitably remains an act of cultural production.

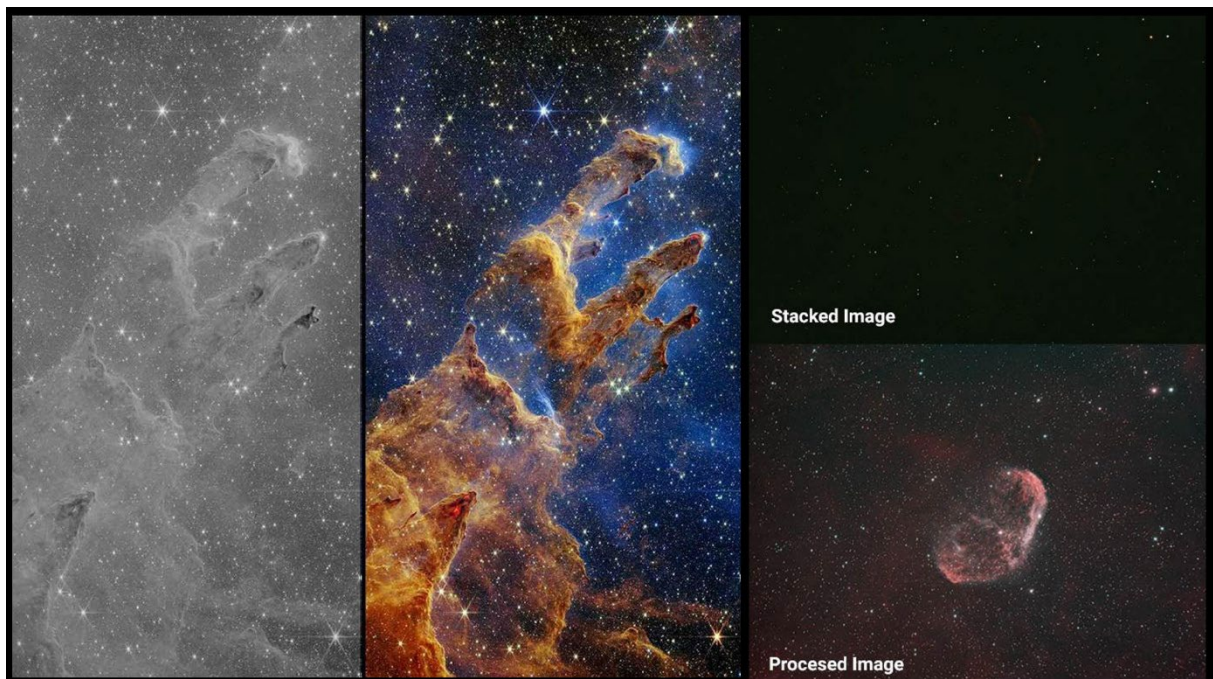
Scientific facts, considered entirely in isolation, are the only things that can be described as neutral. But as soon as we speak about those facts, and as soon as we begin working with scientific data, we start making formal and interpretive choices. We begin to shape—and thereby to engage in a cultural practice.

We enter into a process of contextualizing, selecting, omitting, framing, arranging information in a particular sequence, and creating a narrative. Or, to express it in the language of design, we undertake an act of “aestheticization.”

This aestheticization is an integral part of the process through which knowledge is produced.

There can therefore be no entirely “neutral” scientific practice free from design—and this is especially true of science communication.

Goethe likewise observed: “The highest achievement would be to comprehend that everything factual is already theory.” Facts themselves are therefore already part of our way of perceiving the world—an act of perception into which we inevitably bring ourselves.



Aestheticization is necessary if we are to visualize things and make them intelligible to ourselves, enabling us to recognize patterns and underlying relationships.

This begins with the processing of raw data, which always involves both intervention and design. It is through this process that we gain access to the data and make them available to understanding.

A compelling historical example of this path toward knowledge is Ernst Haeckel of Jena, whose work repeatedly surfaces, if sometimes only tangentially, in the planetarium context. Haeckel lived and

worked in Jena some time before the invention of the planetarium and was the leading proponent of Darwin's theory of evolution in the German-speaking world.

He represents a remarkable union of the artist and the scientist in a single individual.

By examining the appearance of natural forms and deliberately arranging and juxtaposing them, Haeckel visualized evolutionary processes, making them visible and comprehensible and drawing conclusions about the mechanisms of evolution.

He also regarded the aesthetics of natural forms as the expression of a formative force inherent in nature. In his book *Art Forms in Nature*, he therefore appreciated the objects of his research not only scientifically but also for their aesthetic qualities.



Here, a process of scientific inquiry passed directly into artistic interpretation, with consequences that significantly influenced Art Nouveau.

At the same time, Haeckel is also interesting because his work illustrates the problems that can arise from excessive aestheticization and the oversimplification of complex phenomena.



Haeckel's representations were guided by his thesis that ontogeny—the development of an individual organism—was an abbreviated recapitulation of phylogeny, the evolutionary history of its lineage.

As a deliberate simplification and rough rule of thumb, this idea may still retain a certain heuristic value. The underlying relationships, however, are considerably more complex. The immutable law of nature that Haeckel believed he had identified is no longer tenable. His example therefore also demonstrates the potential difficulties that can arise during the process of aestheticization.

This illustrates why it is useful to reflect critically on the underlying and virtually unavoidable process of design. In principle, it closely resembles what all of us do in the planetarium.

We tell stories within forty-five or fifty minutes whose underlying subjects are highly complex and which we attempt to communicate through intelligible images.

In doing so, we are often guided by universal aesthetic instincts. At the physical or perceptual level, these frequently have evolutionary origins. Once they enter the realm of abstraction, they are shaped by ideas of symmetry, harmony, order, and simplicity—much like the idea of an elegant or beautiful equation in physics.

What we experience as “beautiful” also enters into play: a concept with a long and constantly changing history that has always been closely connected to the concept of the “true.” In Heidegger's terms: “Beauty is one way in which truth occurs as unconcealedness.”

Not least, we are also influenced by the guiding ideas of our own time.

As Walter Benjamin put it: “The manner in which human sense perception is organized is determined not only by nature but by historical circumstances as well.”

Our procedure therefore closely resembles that of the artist, who—in principle, and perhaps this is where the most fundamental answer to the question “What is art?” can be found—condenses meaning.

It is consequently difficult to determine where a “scientific program” ends and a “cultural program” begins. It therefore seems both logical and productive for these fields to emerge from one another, as they frequently do in planetariums throughout the German-speaking world, and to revolve together around a central question:

What is a planetarium?

Because the German-speaking world is fairly unique in regarding culture as an essential and integral dimension of the planetarium—and because feedback on our DIVE Festival revealed a strong desire for opportunities for professional exchange—the idea emerged to develop a gathering dedicated to this field of tension between science, design, and art, as well as to the many areas in which they intersect.

Through panels, lectures, and presentations under the planetarium dome, we want to approach this discussion from a wide variety of perspectives.

For example, we want to present collaborations in which scientists and artists have worked directly with one another, whether initiated from the scientific or the artistic side.

We also want to examine compelling examples of artistic and cultural programming from across the international planetarium community.

In addition, we want to explore historical perspectives—for example, through figures such as Haeckel or through the history of immersion, understood not simply as the history of the virtual-reality headset but more broadly as the history of immersive “spaces of experience.”

One place I personally find particularly fascinating in this context is Wörlitz Park. Created approximately 250 years ago with an Enlightenment purpose, the park is a carefully composed experiential environment. It consists of designed nature, dramaturgically planned pathways, and deliberately positioned sightlines that unfold sequentially like a kind of enchanted immersive film. Crucially, it makes its underlying Enlightenment ideas available to sensory experience.

From my perspective, this creates an exceptionally interesting parallel with a twentieth-century medium of public enlightenment—the planetarium—and with the work we do today.

The event should, of course, also make these ideas tangible through concrete examples of work, which we intend to present in the planetarium on the Friday and Saturday of the event.

The aim of Spherlcon is to initiate a shared exchange on science and art under the broad theme “The True and the Beautiful”—and to conduct this exchange together with our international colleagues.

And that brings me to our invitation to Spherlcon.one. We plan to hold Spherlcon on November 20 and 21, and we warmly invite all of you to come to Bochum, participate, and contribute. Our hope is that everyone involved will take away ideas and experiences that can inspire our work in planetariums, both directly and indirectly.