

Sky and Galaxy

– Roof Garden Lighting Design Concept

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Lighting designer · Graphic designer

In designing lighting, the objective is always to create a good ambience. Depending on the lighting, one space or building can be grandiose, calm, festive, or even intimate. Architects traditionally present their architecture in a beautiful perspective image, bathed in sunshine. It is our aim as lighting designers to create another face at night. How to emphasize the great character of the architecture, to satisfy all functions, offer convenience to users, and, if possible, add a little surprise only after sunset?

This project involved lighting a very unique rooftop terrace. This terrace is more than just a place to take a break; it features an amphitheater that brings together researchers in a real center of scholarship. This made it essential to create a lighting scheme that could accommodate diverse needs, including conferences and receptions. Given this, it was an obvious step to highlight the characteristic pergola and stair design, and symbolize IPMU's philosophy with light.

Lighting Design Concepts

As a site for researching the universe, the rooftop

lighting of the new institute facility was designed with the themes of "sky and galaxy." Details are as follows:

1. The lighting fixtures were positioned low, in consideration of the dark-sky and environment: To avoid presenting an obstacle when looking up into the night sky, and to minimize light escaping from the surroundings, all lighting fixtures are positioned at a low height or recessed in the wall.
2. Luminous feeling integrated in architecture: By dissimulating lighting fixtures in the structures, a neat appearance is guaranteed during the day. Those hidden above the diagonal wall brighten the amphitheater space indirectly. This creates a comfortable lighting ambience and shows up people's expressions better.
3. A welcoming, eye-catching feeling: The symbolic pergola, visible when approaching from the station, is floodlit in discreet blue, representing the sky. Bollard lighting is reminiscent of the galaxy, and is deployed next to the stairs, creating a cheerful and welcoming atmosphere.

A night view of IPMU research building's rooftop with "nebula pattern" lighting. Lighting design and photo: Akari Lisa Ishii I.C.O.N.



A night view of IPMU research building's rooftop with "aurora pattern" lighting. Lighting design and photo: Akari Lisa Ishii I.C.O.N.



4. Light where it is needed, for friendly operation: Punctual lighting is installed, such as footlights at the stairs and spotlights at the entrances for better function and minimum installation. All lighting sources used—such as LED and compact fluorescent lamp—are low-energy consuming. They are controlled by a timer that is switched on automatically at sunset and off at a certain time, to help protect the environment.

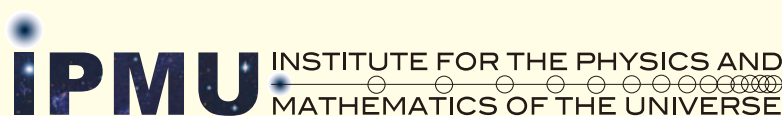
The pergola lighting has eight different programs, which were defined after onsite trials. The “daily pattern” is white when it is turned on, gradually turning into light blue, and then finally into deep blue as the time passes. “One-color patterns” in colors such as fresh white or vivid turquoise blue are for conferences. At special events, a “nebula pattern” with randomly changing different nuances of blue, or an “aurora pattern” with mild pastel colors are

also preset. I imagine that the Institute will take advantage of these lights by choosing lighting that suits the activity.

It is my hope that all users of the facility are able to take a break on the rooftop at sunset, and relax with the lighting. I hope they can refresh their thoughts about the universe in this floodlit ambience, and

enjoy receptions under cheerful lights.

Finally, I would like to express my deepest appreciation to all associated with this wonderful project: IPMU's directors and staff, especially Dr. Hiroaki Aihara, Deputy Director; Prof. Hidetoshi Ohno, the architect and his staff, as well as the contractors and technicians on site.



IPMU Windows to Look Up the Universe – Logo Graphic Design Concept

Akari Lisa Ishii

When I was asked by Deputy Director Dr. Hiroaki Aihara to design a logo for this new institute, which specializes in studies of the universe, a diverse array of the vast, mysterious and beautiful images of the night sky came to mind. Some were obvious, some ambiguous, and others were unclear — like looking for a star at an unfathomable distance through a telescope. These images encouraged me to create seven options with different graphic expressions.

One option symbolized the collaboration between physics and mathematics with a combination of green of the earth and the blue of the universe. Another represented the orbit of planets and atomic movements with several ovals. One idea consisted of letters in dots

to represent a three-dimensional image of energy and molecules. Another consisted of a circle with black and white contrast in liaison with dark energy... Graphic design-wise, many experiments were made by modifying typography to express dynamism, by using negatives to give a shining impression, and by selecting different colors to suggest academic development.

The final version is the one above, selected by IPMU. It actually consists of two options submitted previously: the idea to look up at the universe through a window forming "IPMU" and a concept clearly indicating the title with many small circles representing planets and speed. In addition, to give the impression of breaking up the regularity, a gradated light point is used in lieu of the dot of the "i" at the top. This was the embodiment of the very first instinct to look up into the starry sky through a telescope, and its strong symbolism may have attracted the decision makers.

*Akari Lisa Ishii
also designed
the IPMU logo.*

It was a great honor to contribute to IPMU by graphic design. I hope this new logo together with the new facility will help the Institute continue its development.



Akari Lisa Ishii is a lighting and graphic designer. As President of I.C.O.N. Inc. (<http://www.icon-lighting.com/>), she is involved in lighting design projects around the world. She is also active in photography and painting, giving lectures, and writing books. She has published *My Work, Fascinated by Lights – Lighting Project of Notre Dame de Paris* (in Japanese), Kodansha, Tokyo, November 2004 and *City and Light -Enlightened Paris* (in Japanese), Suiyosha, Tokyo, January 2005.