

Expert's experience – put into practice
 PYTHA maximizes your business opportunities
 using advanced modern technology.

Suitable fields of interest

Lighting industry and lighting planners
 Lighting designers
 Show and event illumination
 Exhibition design and shop fitting
 Illumination of buildings interior/exterior
 Interior designers
 Advertising etc.

Summary of benefits.



PYTHA's team has been collaborating for many years with university research groups and industry experts to develop a scientifically sound and economically useful solution which helps to resolve your issues quickly and efficiently.

- Design and visualization of illumination
- Design and construction of lamps
- Lighting planning
- Import of "Eulumdat" files including preview browser
- Simulation of lighting effects
- Change textures and materials interactively using "drag and drop"
- All visualization tools designed to work in real time
- Photorealistic, dynamic visualization of LED devices
- Simulation of incidence of light with the help of a daylight simulation model, depending on season, time, geographic location, density of clouds etc.
- Simulation of lighting planning using color change, variable brightness, aperture and direction
- Extensive library of lamps and lights

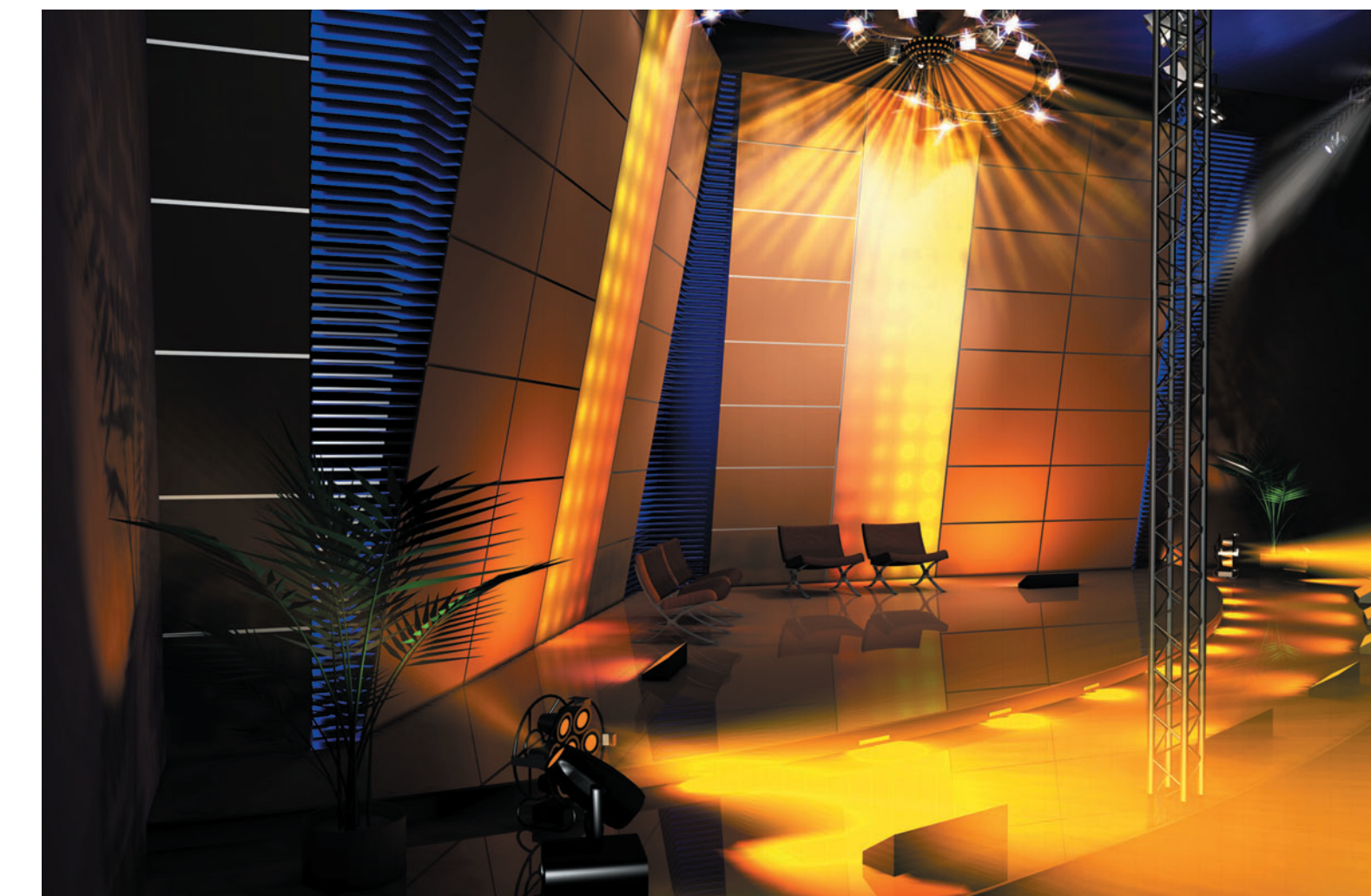
3D-CAD

Light up your world!
 Lighting planning and visualization
 with PYTHA Radio Lab

P L A N N I N G P R E S E N T A T I O N P R O D U C T I O N

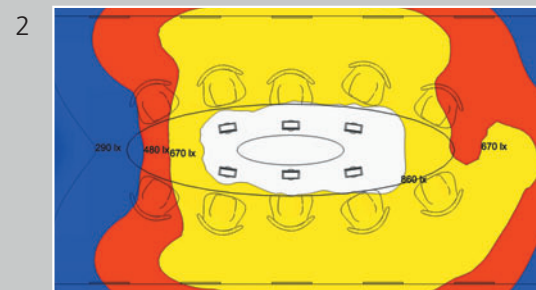
PYTHA – the 3D CAD software for lighting planning and design

- Real time radiosity
- Perfect presentation
- Quick calculation of lighting



PYTHA has been designed, tested and successfully implemented by industry experts who have contributed to the design of its functionality, providing smooth interaction between planning, presentation and production.

An important aspect is PYTHA's ability to precisely calculate and assess light distribution within the planning period. The results of the analysis can be visualized in a colored lighting planning graph.



1 PYTHA RadioLab utilizes the radiosity method of lighting calculation taking into consideration the aspect of 'indirect light' and surface properties. This results in an extremely realistic lighting representation of an interior. Virtual photometry can be determined during the planning period.

2 With the help of RadioLab's color gradient data, lighting can be easily assessed by the click of a mouse button. Include Iso-lux lines in your presentation to illustrate the lighting intensities and gradients at every point!

With PYTHA RadioLab nothing is left to chance: lighting is exactly quantified with intensities and gradients described at each point in the scene.

Contact your local PYTHA partner:



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If you require a 3D design and wish to show your results to your prospective customer you require a perfect presentation to maximize your business opportunities. PYTHA Lab provides you with a software solution to satisfy the requirements of your industry. Use PYTHA software to present your proposals to impress your clients. PYTHA is also your perfect tool to determine physically correct lighting calculations.

The overall feeling of a room's ambience is strongly influenced by indirect light. This factor presented special challenges to our programmers in that they had not only to consider the direct light emanating from a light source but also the reflected light from all surfaces within a room.

PYTHA RadioLab produces realistic lighting for your designs.

Correct lighting allows your ideas to turn into brilliant photorealistic presentations.

Make the day break with a click of your mouse and PYTHA RadioLab – the quality of your rendered images using ambient light, is based on RadioLab's ability to combine direct and indirect illumination. RadioLab uses sophisticated mathematical algorithms to calculate individual properties including reflectivity for each surface. The results are photo quality images with stunning realism.



In the world of virtual reality the point of difference is the lighting.

PYTHA RadioLab has been developed especially for this demanding task. Starting from a light source (direct light) and the reflectivity of surfaces, RadioLab calculates the amount of indirect light and distributes it within your scene. RadioLab provides a powerful tool allowing its users the opportunity to present scenes exactly the way they will appear once completed.

RadioLab uses a global illumination model to calculate light distribution and reflection with respect to all surfaces within a scene. The propagation of light is calculated using direct light emitted by light sources as well as the indirect light reflected by all surfaces. Contrary to conventional raytracing programs, RadioLab calculates all lighting within a scene independently from the position of an observer and consequently produces images which are as realistic as possible from any position within a scene.

RadioLab allows its users the experience to walk through a perfectly animated scene in real time.

PYTHA gives you all you need to present your results in real time!



Numerous tools to present your ideas your way.

PYTHA, your 3D CAD software, provides you with many powerful features to model and visualize your ideas. The software is provided with a complete range of easy to use functions that allow its users to design virtually anything. Complex 3D libraries make your life much easier by giving you access to several ready made objects.

- Lights for the living area
- Lights for professional applications
- Architectural elements
- Wide selection of furniture
- Construction elements for exhibition design, shop fitting and event stages

Create your own library of lamps – it is so easy with PYTHA!