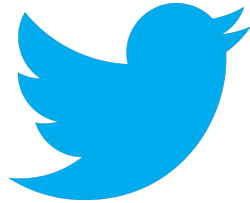


# Les technologies de rendu 3D dans le cinéma et le jeu vidéo

# Outils

Google Scholar





Mixed / augmented reality Virtual reality  
Graphics input devices  
Computational geometry  
Randomness, geometry and discrete structures  
Image manipulation  
Texturing  
Rendering Shape modeling  
Volumetric models Document types  
Computer graphics  
Animation 3D imaging  
Parametric curve and surface models  
Graphics systems and interfaces  
Virtual reality  
Graphics recognition and interpretation  
Special purpose systems  
Human computer interaction (HCI)

## JOURNAL



### Proceedings of the ACM on Computer Graphics and Interactive Techniques

The Proceedings of the ACM in Computer Graphics and Interactive Techniques (PACMGIT) publishes original research of the highest quality dealing with all areas of computer graphics and interactive techniques including rendering, modeling, animation, and digital...

## NEWSLETTER



### ACM SIGGRAPH Computer Graphics

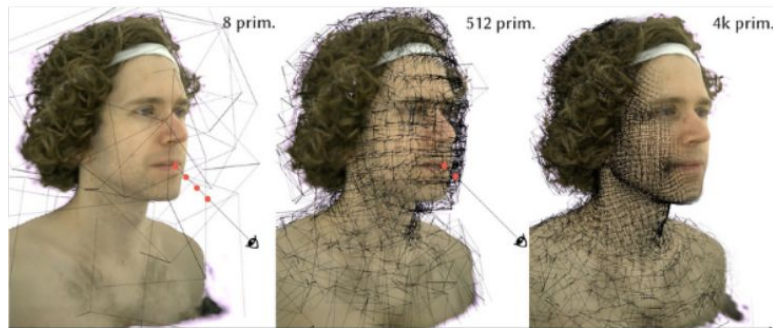
SIGGRAPH's mission is to promote the generation and dissemination of information on computer graphics and interactive techniques. Members include researchers, developers and users from the technical, academic, business, and artistic communities....

# SIGGRAPH : Special Interest Group on Computer Graphics



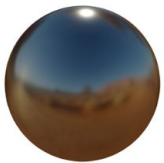
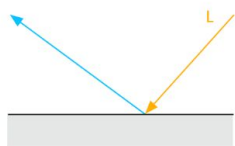
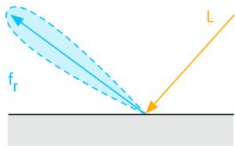
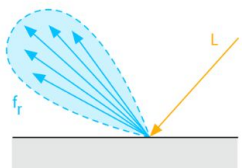
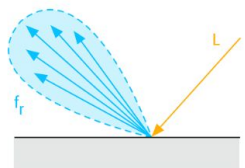
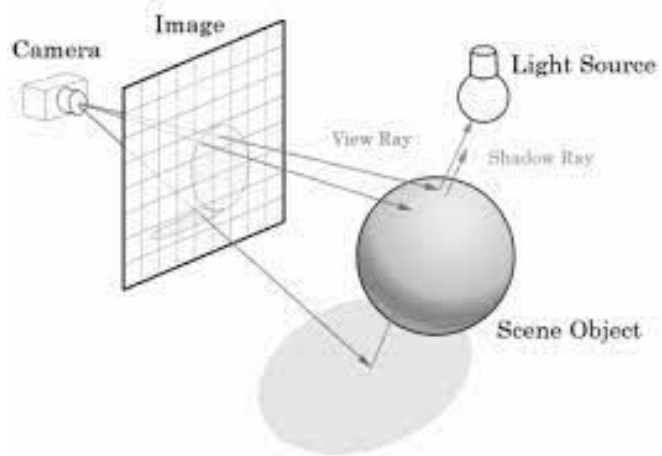
Since 1974, ACM SIGGRAPH has been fostering and celebrating innovation in Computer Graphics and Interactive Techniques, building communities that invent, educate, inspire, and redefine the computer graphics landscape. For more news and headlines, visit the [ACM SIGGRAPH news feed](#).

- Conférences
- Blogs
- Publications
- Interview



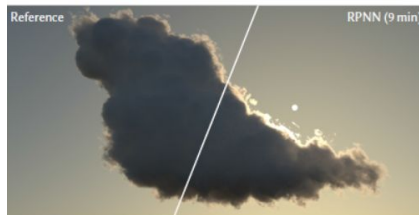
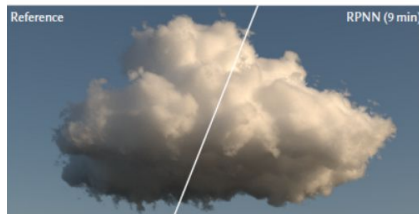
Mixtures of Volumetric Primitives  
2M voxels

# Le Ray Tracing

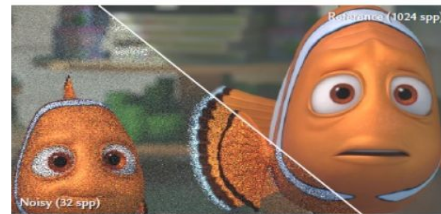




- Publications scientifiques
- Plus large que simplement rendu 3D



**Deep Scattering**



TRAINING



TEST

**Denoising**





13



Virtual Reality, Alternative Reality, Metaverse

[AFFICHER LA PLAYLIST COMPLÈTE](#)

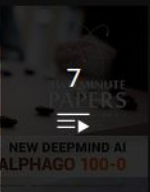


7



AlphaGo, AlphaZero, AlphaGo Zero

[AFFICHER LA PLAYLIST COMPLÈTE](#)



12



3D Printing / 3D Fabrication

[AFFICHER LA PLAYLIST COMPLÈTE](#)



37



Light Transport, Ray Tracing and Global Illumination (Two Minute...

[AFFICHER LA PLAYLIST COMPLÈTE](#)



INCORRECT

106



Fluid, Cloth and Hair Simulations (Two Minute Papers)

Mise à jour il y a 2 jours  
[AFFICHER LA PLAYLIST COMPLÈTE](#)



390



AI and Deep Learning - Two Minute Papers

[AFFICHER LA PLAYLIST COMPLÈTE](#)

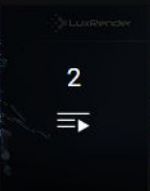


2



LuxRender

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596



Two Minute Papers

Mise à jour il y a 2 jours  
[AFFICHER LA PLAYLIST COMPLÈTE](#)



39



TU Wien Rendering / Ray Tracing Course

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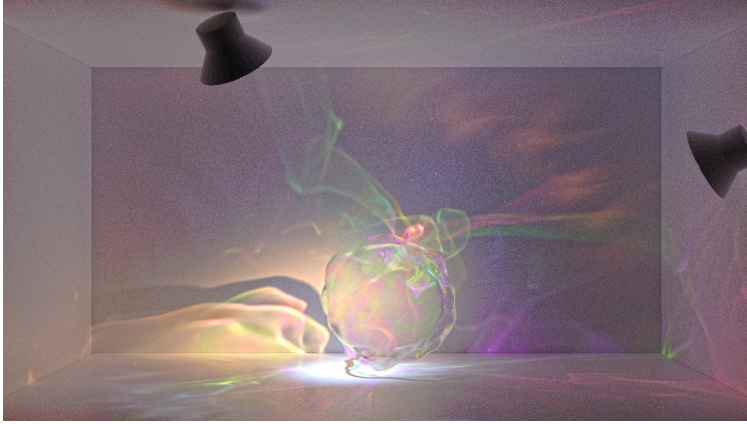
12



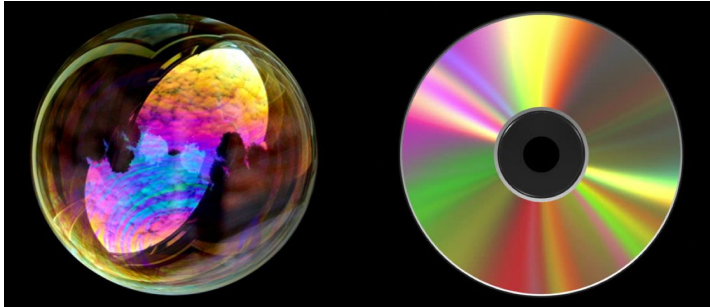
Mostly Science Videos

[AFFICHER LA PLAYLIST COMPLÈTE](#)

# Besoins spécifiques en fonction de l'objet à rendre



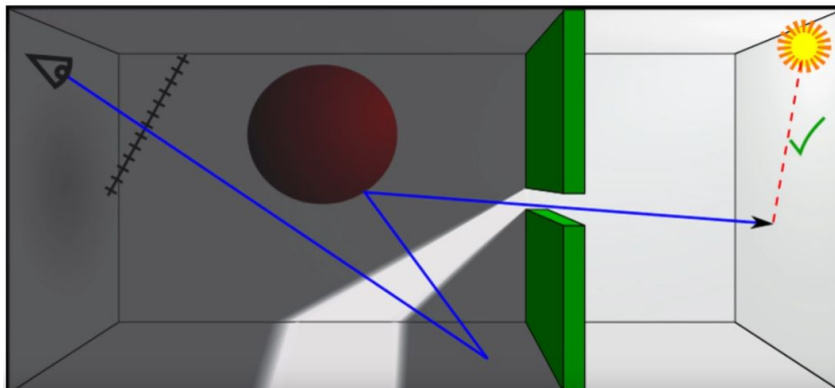
- Lumière caustique
- Dispersion
- Fluorescence
- Phosphorescence
- ...







# Metropolis light transport





## Complex Landscapes

≈ 500K Individual Plants

Source: [Makowski et al. 2019]

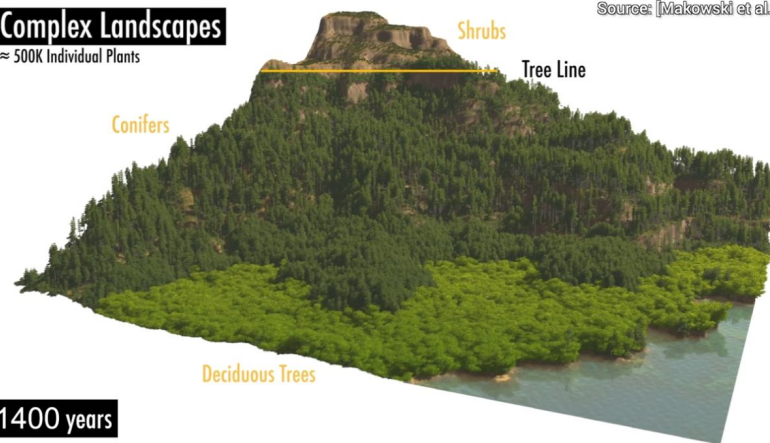


261 years

## Complex Landscapes

≈ 500K Individual Plants

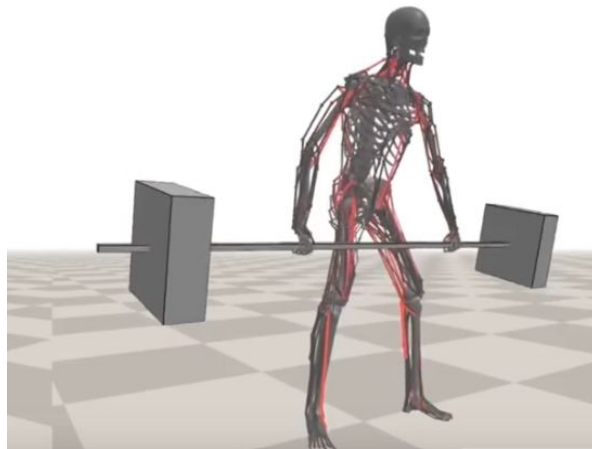
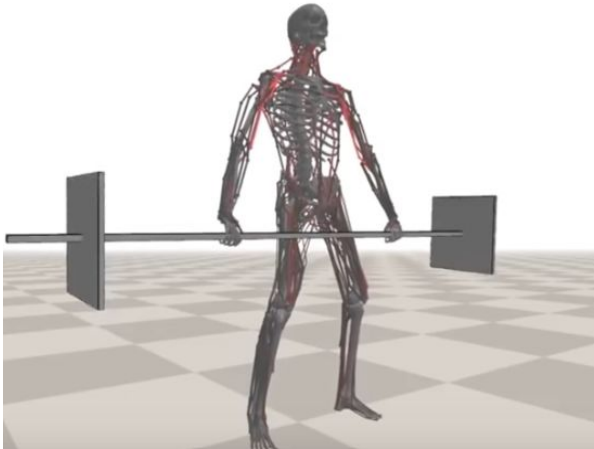
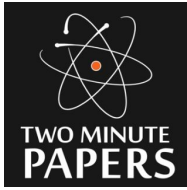
Source: [Makowski et al. 2019]



1400 years

Segregation of Plant Types on Different Elevation Levels

<https://youtu.be/8YOpFsZsR9w?t=212>



<https://youtu.be/kie4wjB1MCw?t=21>



<https://zivadynamics.com/case-study/lion>