



# **Structural Analysis & Design Software**

[www.dlubal.com](http://www.dlubal.com)



**Dipl.-Ing. (FH) Andreas Hörold**  
Organizer

Marketing & Public Relations  
Dlupal Software GmbH



**Dipl.-Ing. (FH) Lukas Sühnel**  
Co-Organizer

Product Engineering & Customer Support  
Dlupal Software GmbH

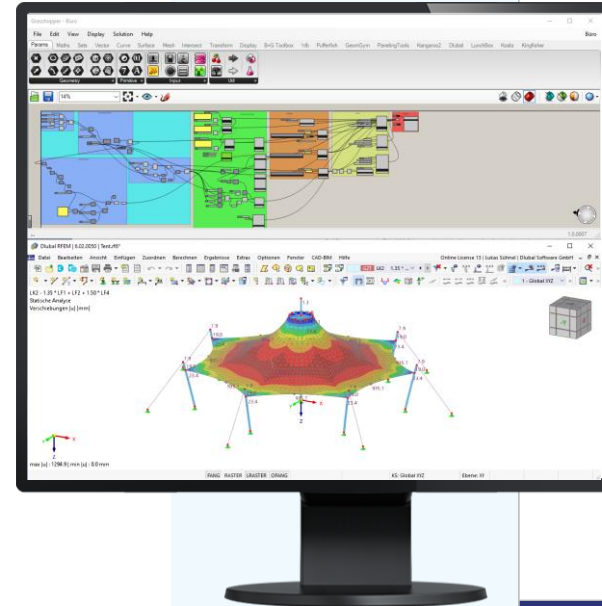


**Paul Sivolgin, B.Eng.**  
Co-Organizer

Product Engineering  
Dlupal Software GmbH

## Webinar

# Modeling Membrane Structure Using Rhino/Grasshopper and RFEM 6



# Questions During the Presentation



GoToWebinar Control Panel  
**Desktop**



E-mail: [info@dlubal.com](mailto:info@dlubal.com)



Show or hide control panel



The screenshot shows the GoToWebinar control panel interface. At the top, there is a menu bar with 'File', 'View', and 'Help'. Below it is the 'Audio' section, which includes a 'Sound Check' indicator with a green bar and a question mark. There are two radio buttons: 'Computer audio' (selected) and 'Phone call'. A red 'MUTED' indicator is visible. Below this, there are dropdown menus for 'Mikrofon (2- Sennheiser USB h...)' and 'Lautsprecher (2- Sennheiser U...'. A volume slider is also present. The 'Questions' section is below the audio settings, featuring a text input field with the placeholder '[Enter a question for staff]' and a 'Send' button. At the bottom, the 'Webinar ID: 373-901-987' and the 'GoToWebinar' logo are displayed.



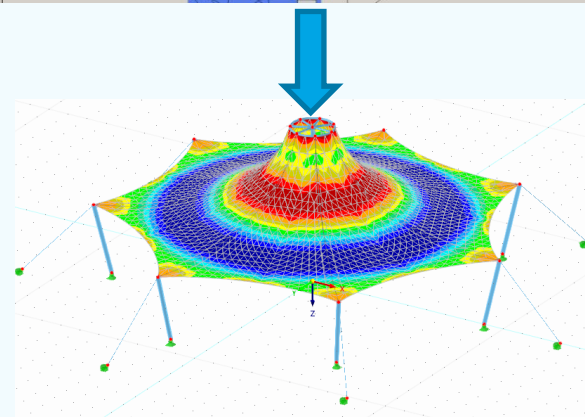
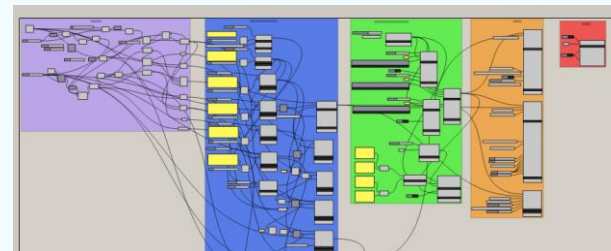
Adjust audio settings

Ask questions



# CONTENT

- 01 New features of the GH interface
- 02 Live demo modeling of a membrane structure
- 03 Planned features





# New features of the GH interface

- Cross-section input via cross-section values
- Nonlinearities for node and line supports as well as member hinges
- New components for line releases

No.	
Name	
Material No.	
Angle $\alpha'$	
Comment	
More	
A	
Ay	
Az	
ly	
lz	
lt	
h	
b	
Type of Component	
Assemble	

GH Node	
No.	
Nodes No.	
u-X	
u-Y	
u-Z	
$\phi$ -X	
$\phi$ -Y	
$\phi$ -Z	
More	
Nonlin X	
Nonlin Y	
Nonlin Z	
Nonlin $\phi$ -X	
Nonlin $\phi$ -Y	
Nonlin $\phi$ -Z	
$\mu$ X	
$\mu$ Y	
$\mu$ Z	
S-dir	
D-type	
Seq	
Angle 1	
Angle 2	
Angle 3	
1st axis	
2nd axis	
Di-Node	
Pi-Node	
Line No.	
Mem No.	
Comment	
Type of component	
Assemble	

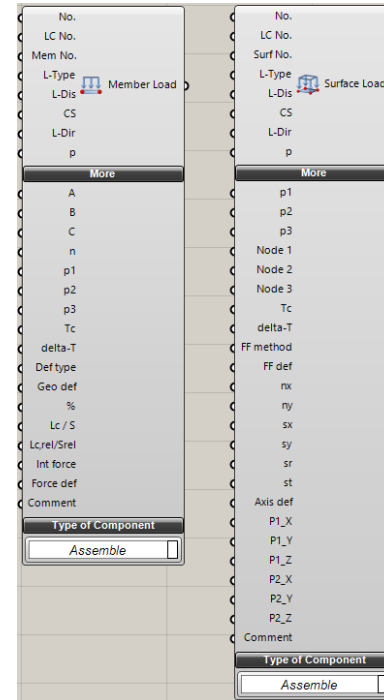
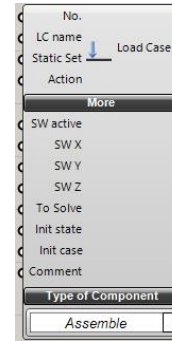
No.	
u-x	
u-y	
u-z	
$\phi$ -x	
More	
NL u-x	
NL u-y	
NL u-z	
NL phi-x	
Comment	
Type of Component	
Assemble	

No.	
L-No.	
Type-No.	
Mem-No.	
Sur-No.	
More	
Solid-No.	
NL u-z	
Rel Loc.	
Def-No No.	
Comment	
Type of Component	
Assemble	



# New features of the GH interface

- Initial state in load cases and load combinations components
- Formfinding loads in member and surface load components



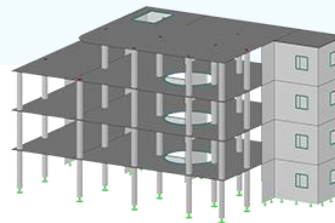


## Planned features for future developments

- Import of results from RFEM into GH (also the FE-mesh)
- Component for FE-mesh settings and start of the calculation
- Import of members including cross-section outlines
- Optimizations regarding the input of rib members
- Component for imperfections

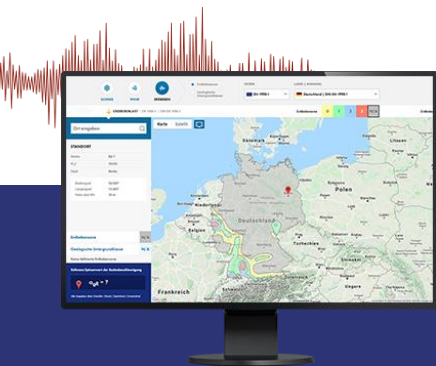


# Free Online Services



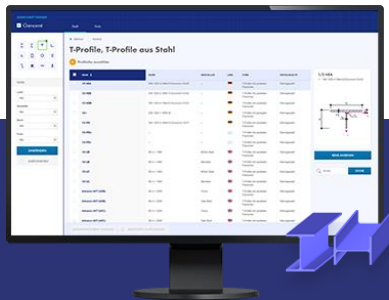
## Geo-Zone Tool

Dlubal Software provides an online tool with snow, wind and seismic zone maps.



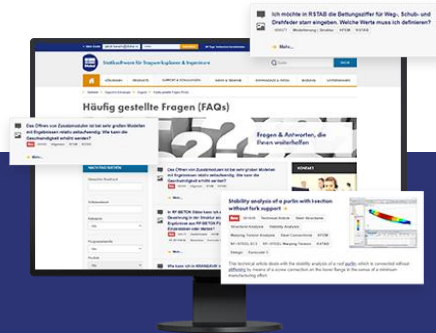
## Cross-Section Properties

With this free online tool, you can select standardized sections from an extensive section library, define parametrized cross-sections and calculate its cross-section properties.



## FAQs & Knowledge Base

Access frequently asked questions commonly submitted to our customer support team and view helpful tips and tricks articles to improve your work.



## Models to Download

Download numerous example files here that will help you to get started and become familiar with the Dlubal programs.







# Free Online Services

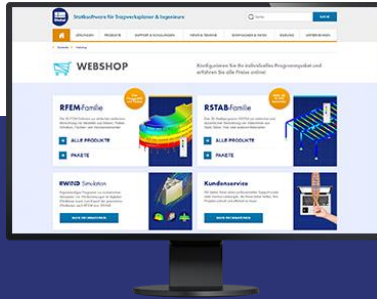
## Youtube Channel - Webinars, Videos

Videos and webinars about the structural engineering software.



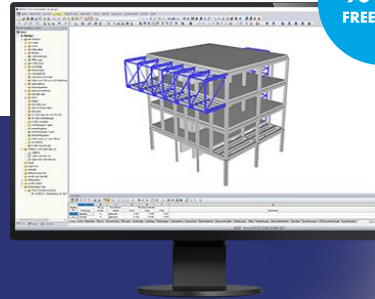
## Webshop with Prices

Configure your individual program package and get all prices online!



## Trial Licenses

The best way how to learn using our programs is to simply test them for yourself. Download a 90-day free trial version of our structural analysis & design software.



We offer free support via email and chat



# — Get Further Details About Dlubal



Visit website  
[www.dlubal.com](http://www.dlubal.com)

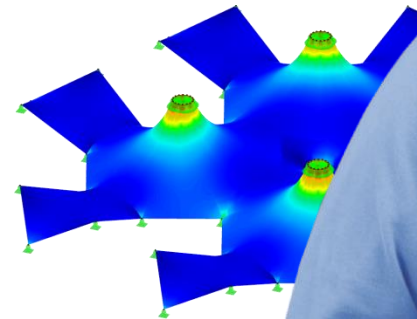
- Videos and recorded webinars
- Newsletters
- Events and conferences
- Knowledge Base articles



See Dlubal  
Software in  
action in a  
webinar



Download  
free trial  
license



**Dlubal Software GmbH**  
Am Zellweg 2,  
93464 Tiefenbach, Germany

Phone: +49 9673 9203-0  
E-mail: [info@dlubal.com](mailto:info@dlubal.com)



[www.dlubal.com](http://www.dlubal.com)