

# The Plasma Simulation Software

# PLASIMO

## Radiation Modeling

## PLASIMO radiation module

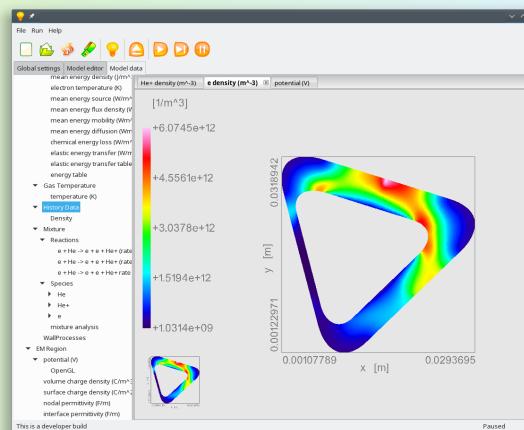
PLASIMO offers various methods for calculating the impact of emission and absorption of radiation in plasmas:

- Net emission coefficient calculator
- P1 method
- Raytracing

## Input data

- PLASIMO's built-in database
- Compatible with HITRAN, ExoMol and NIST databases

- Created for modeling of plasmas with various degrees of equilibrium
- Designed as a flexible, user friendly modeling toolbox
- Available for Windows, macOS and Linux/Unix



P.O.Box 513, 5600 MB Eindhoven, The Netherlands

[info@plasma-matters.com](mailto:info@plasma-matters.com)

[www.plasma-matters.com](http://www.plasma-matters.com)

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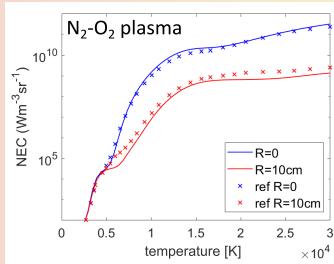


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# Modeling radiation with PLASIMO

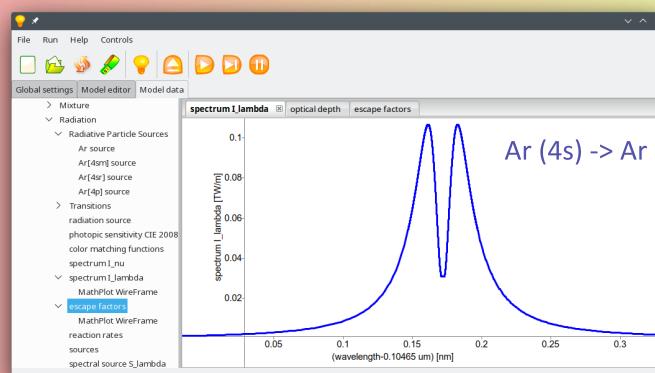
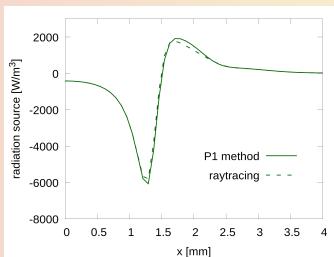
## PLASIMO net emission coefficient calculator

The net emission coefficient method provides a fast way to account for radiative sources.



## PLASIMO P1 method

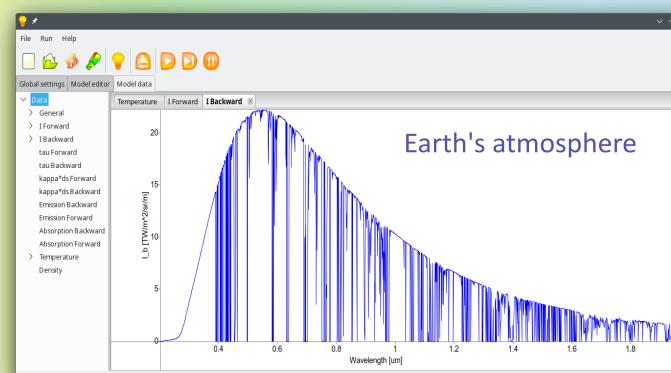
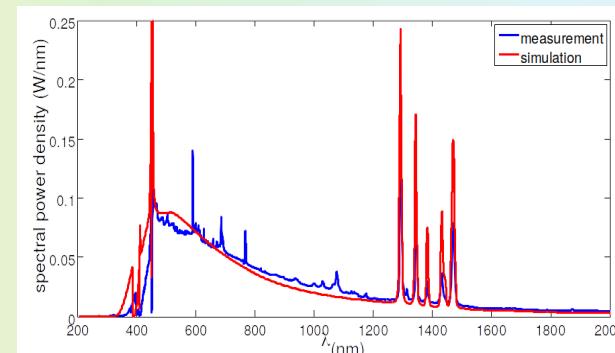
The P1 method yields spatial predictions of the radiative sources. These can compete with the accuracy of the raytracing method.



## PLASIMO raytracing module

The raytracing module calculates the spectral radiance at every point in atomic or molecular plasma, accounting for emission and absorption processes.

- Produces the spectra of the light emitted by the plasma.
- Calculates particle and energy sources that can be consistently coupled to the balance equations in complete plasma models.



## PLASIMO emission/absorption calculators

PLASIMO offers high quality calculators for local emission and absorption coefficients supporting a variety of broadening mechanisms, such as resonance, Stark, Van der Waals and instrumental broadening.

