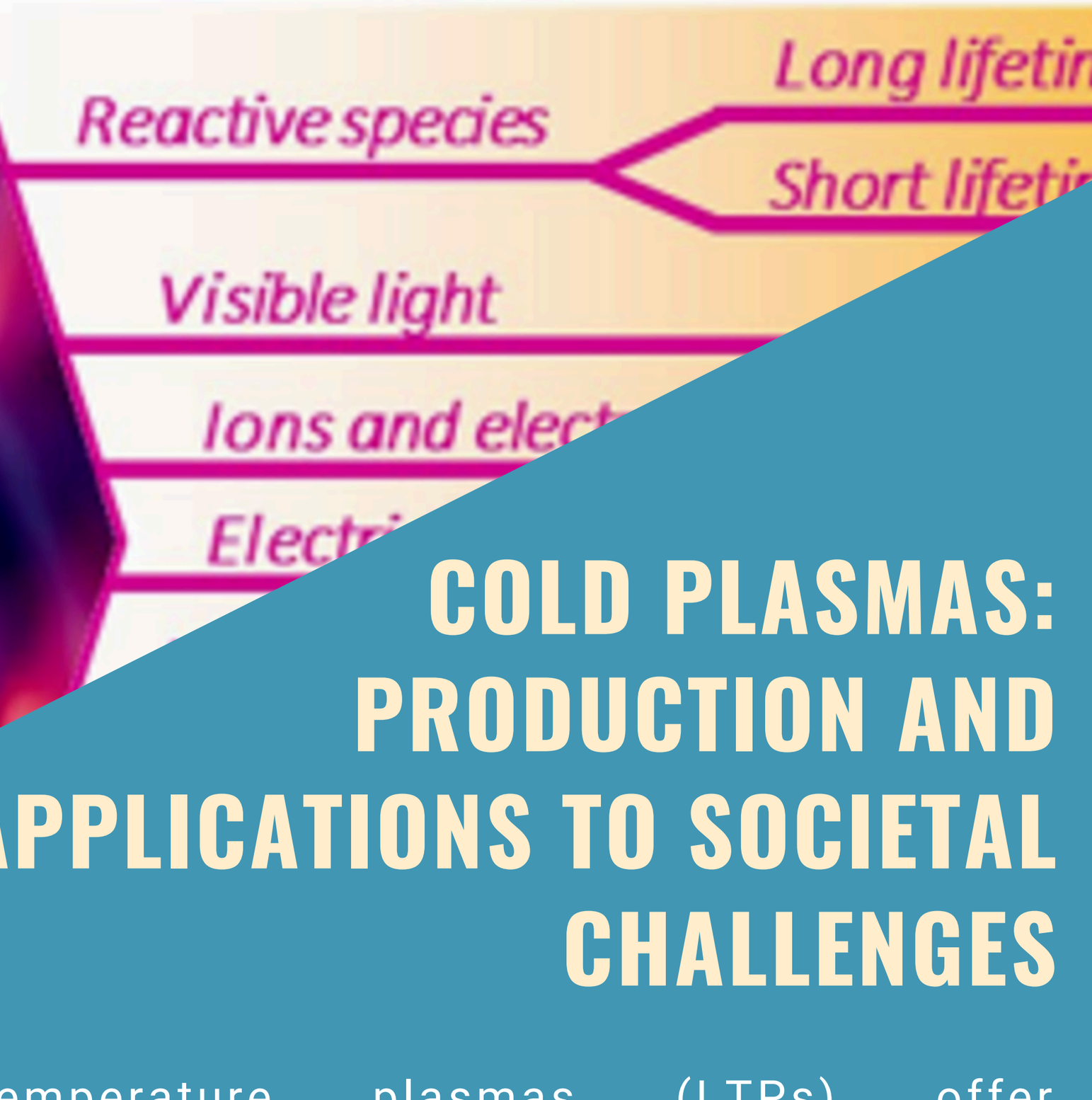

COLD PLASMAS: PRODUCTION AND APPLICATIONS TO SOCIETAL CHALLENGES

Non-equilibrium low temperature plasmas (LTPs) offer environmentally friendly, cost-effective material treatments, including surface modification, coating, nanostructuring, and antimicrobial applications.

They generate reactive oxygen and nitrogen species (RONS) that can positively influence biomedical and agricultural processes, such as seed germination and plant growth.

Plasma Activated Liquids (PAL) extend these benefits more easily and cost-effectively.

LTPs are also effective in degrading organic pollutants in air, water, and soil without additional chemicals.

In food safety, non-thermal plasma can disinfect products and equipment with minimal impact on food quality, producing no harmful residues.

Current challenges include understanding mechanisms, verifying efficiency, and developing practical, cost-effective plasma devices for medicine, agriculture, and the food industry.

ESPRESSO SEMINARS
21 OTTOBRE 2025 | ORE 11:00
AULA AZZURRA - LNS

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