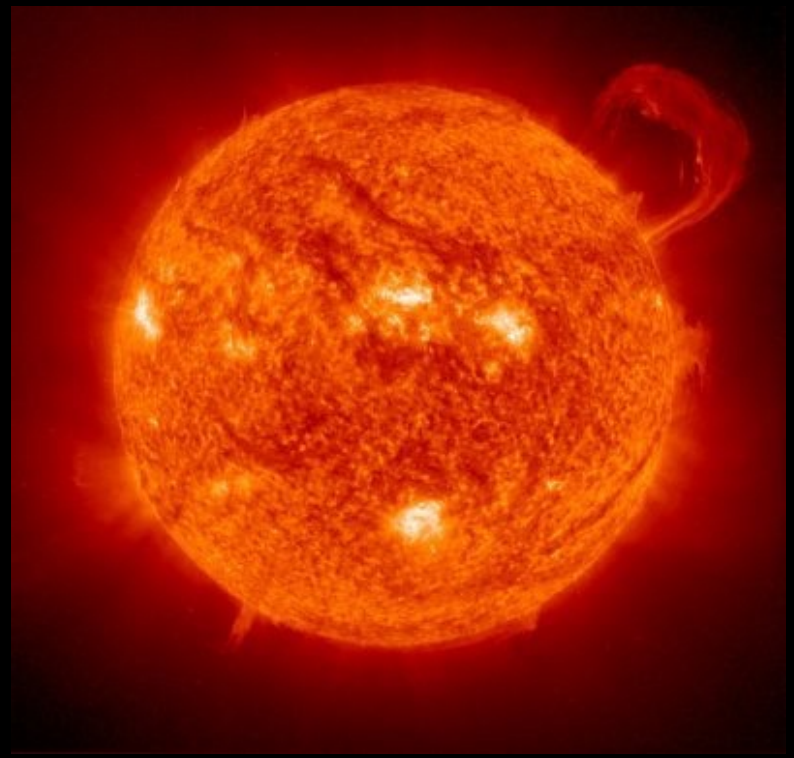
LPPFUSION

FUSION ENERGY IN THIS DECADE



Developing a cheap, clean ,safe and unlimited source of energy

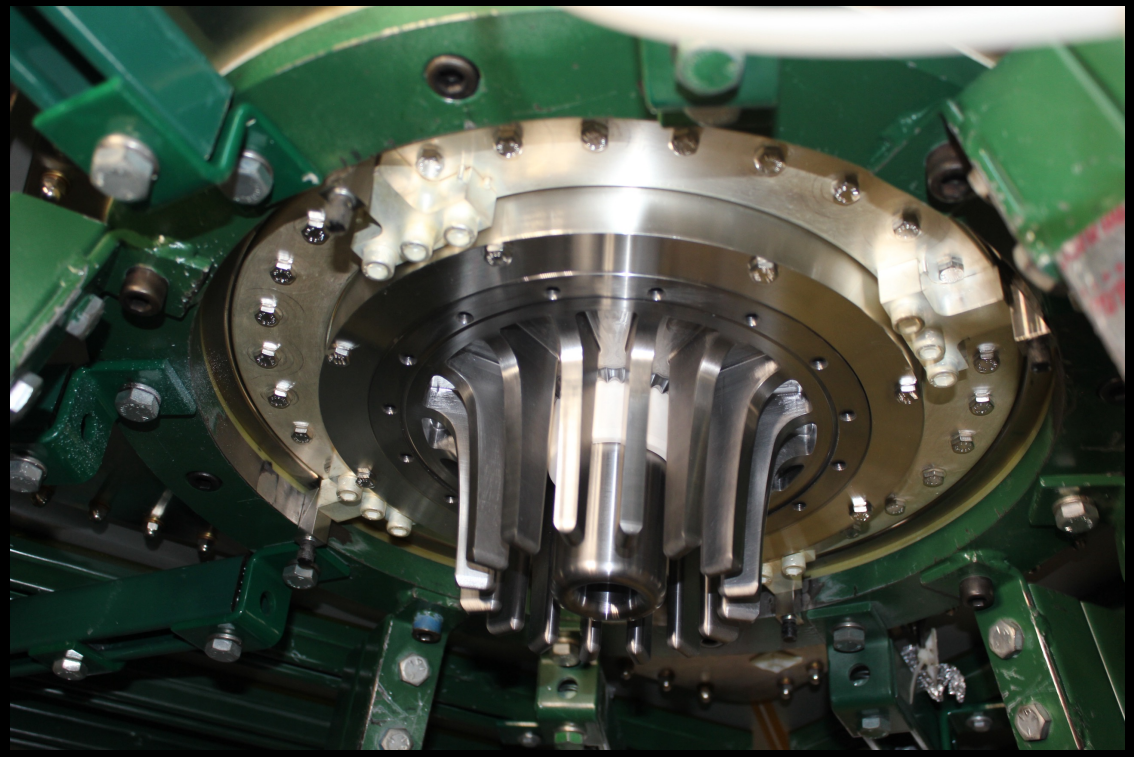
Entirely replace fossil fuels

Same process that powers the sun

Commercialization before 2030

LPPFUSION

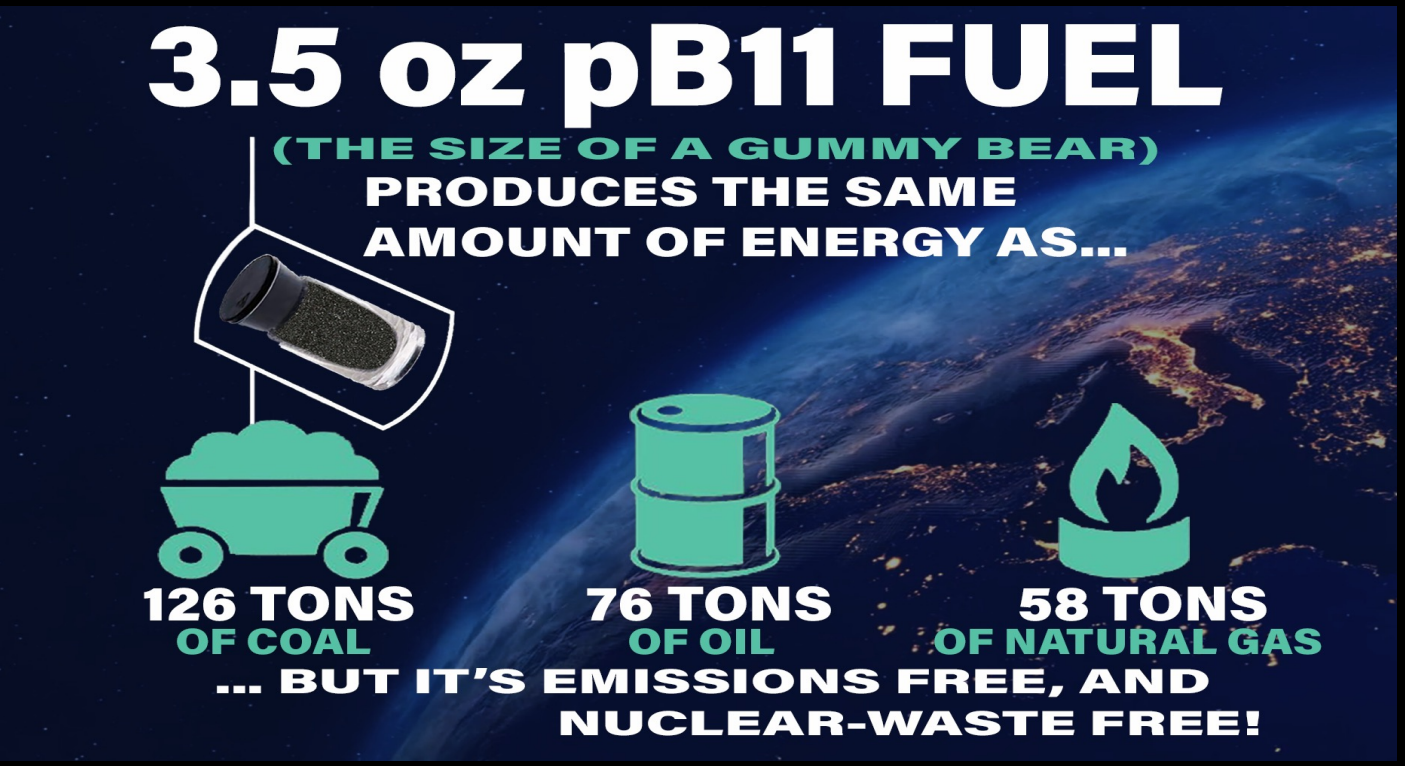
Dense Plasma Focus Device & Hydrogen Boron Fuel (Focus Fusion)



Key advantages:

1. Far cheaper, smaller than existing energy sources
2. Uses, instead of fighting, natural plasma behavior
3. Ideal for decentralized power & portable

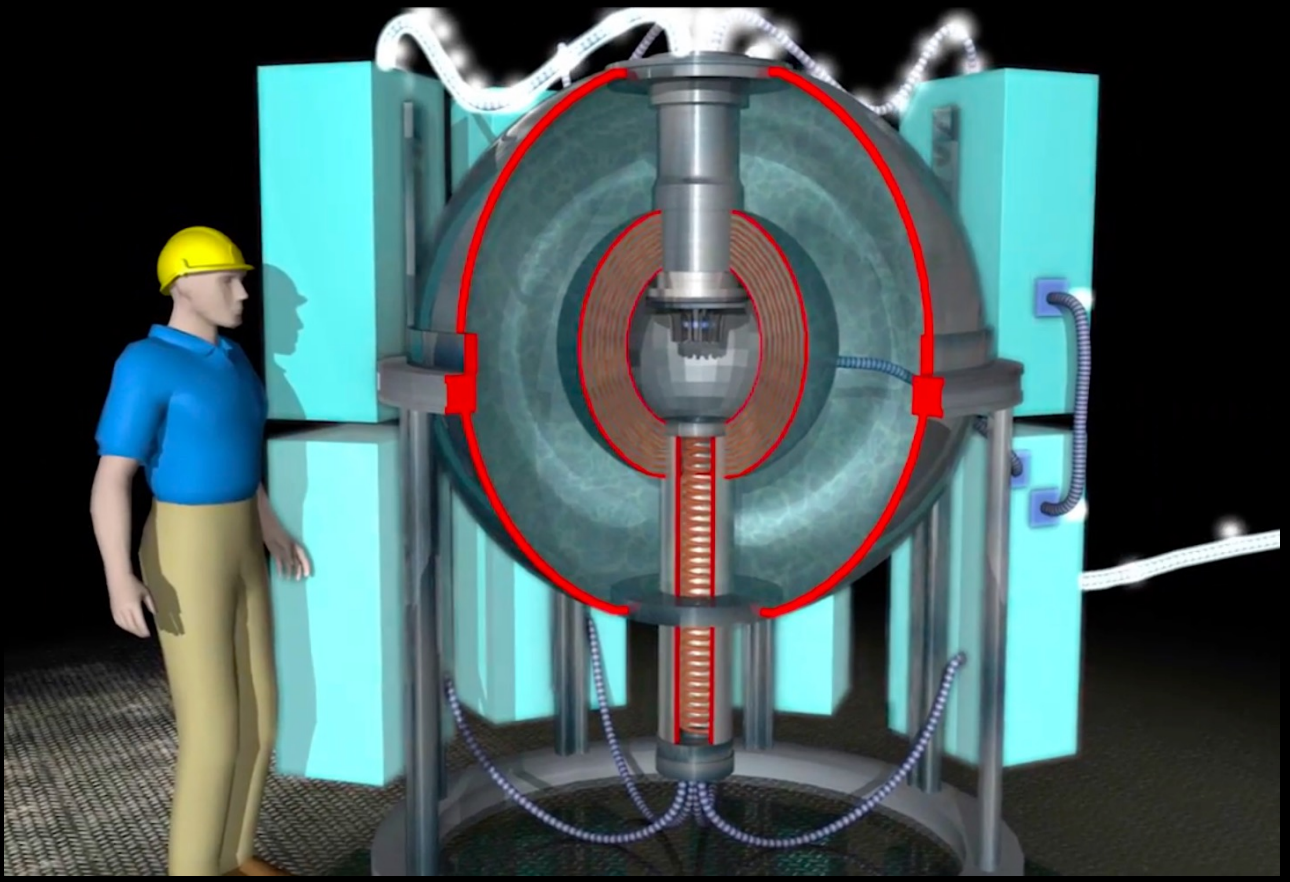
Dense Plasma Focus Device & Hydrogen Boron Fuel



Key advantages:

1. Highest energy density of any fuel
2. Abundant raw materials
3. No radioactive waste
4. Direct conversion to electricity—no turbines, generators
5. Ideal for decentralized power

COMPACT 5 MW FUSION ENERGY GENERATOR

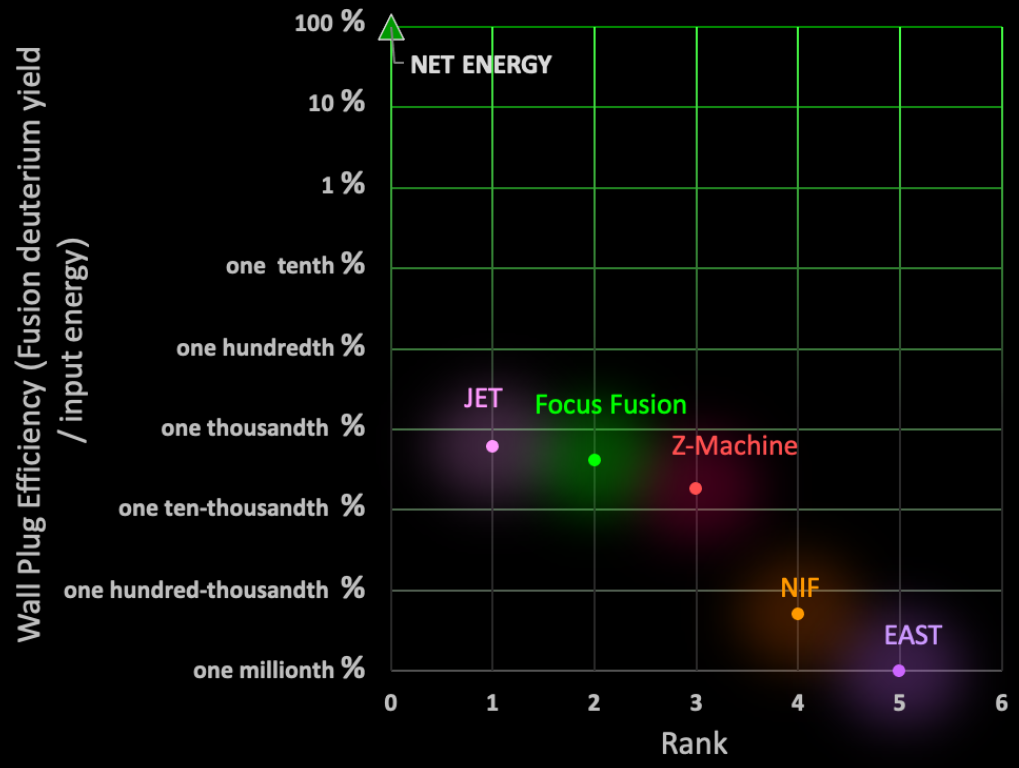


- 200 pulses/sec
- Capital cost with mass production: $0.1/W
- Electric energy cost: 0.5 cents/kWH

LPPFUSION

Best Lab Results of Any Private Fusion:

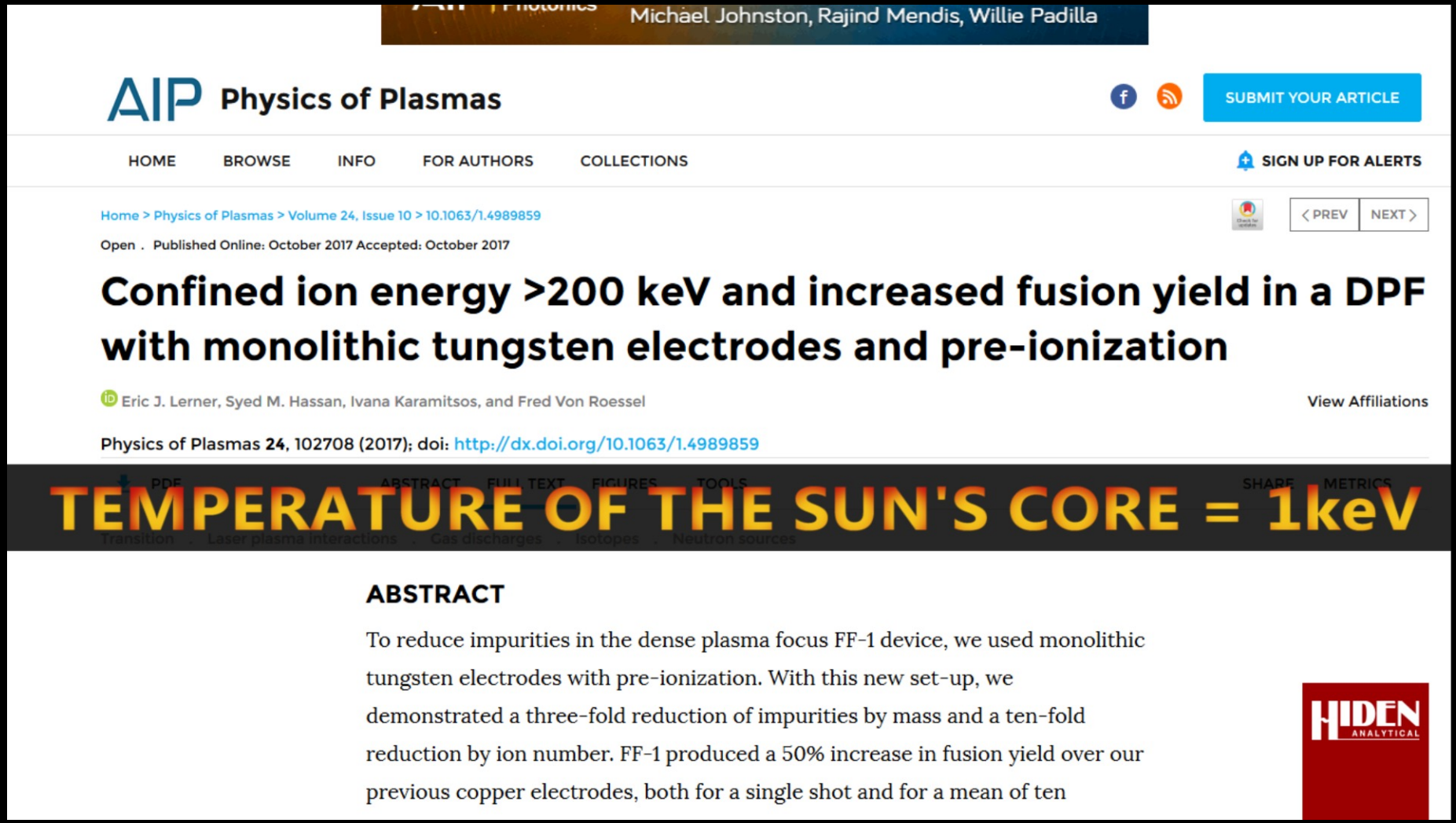
FUSION ENERGY YIELD AS A PERCENTAGE OF ENERGY INPUT INTO THE DEVICE-- MORE THAN 1,000 TIMES OTHER PRIVATE EFFORTS



Published: Physics of Plasmas 24, 102708 (2017)
FF-1 Achieved 0.25 J yield with 60 kJ device input

LPPFUSION

PATENTED, PEER-REVIEWED



Michael Johnston, Rajind Mendis, Willie Padilla

AIP Physics of Plasmas

SUBMIT YOUR ARTICLE

HOME BROWSE INFO FOR AUTHORS COLLECTIONS SIGN UP FOR ALERTS

Home > Physics of Plasmas > Volume 24, Issue 10 > 10.1063/1.4989859

PREV NEXT

Open . Published Online: October 2017 Accepted: October 2017

Confined ion energy >200 keV and increased fusion yield in a DPF with monolithic tungsten electrodes and pre-ionization

Eric J. Lerner, Syed M. Hassan, Ivana Karamitsos, and Fred Von Roessel

View Affiliations

Physics of Plasmas **24**, 102708 (2017); doi: http://dx.doi.org/10.1063/1.4989859

PDF ABSTRACT FULL TEXT FIGURES TOOLS SHARE METRICS

TEMPERATURE OF THE SUN'S CORE = 1keV

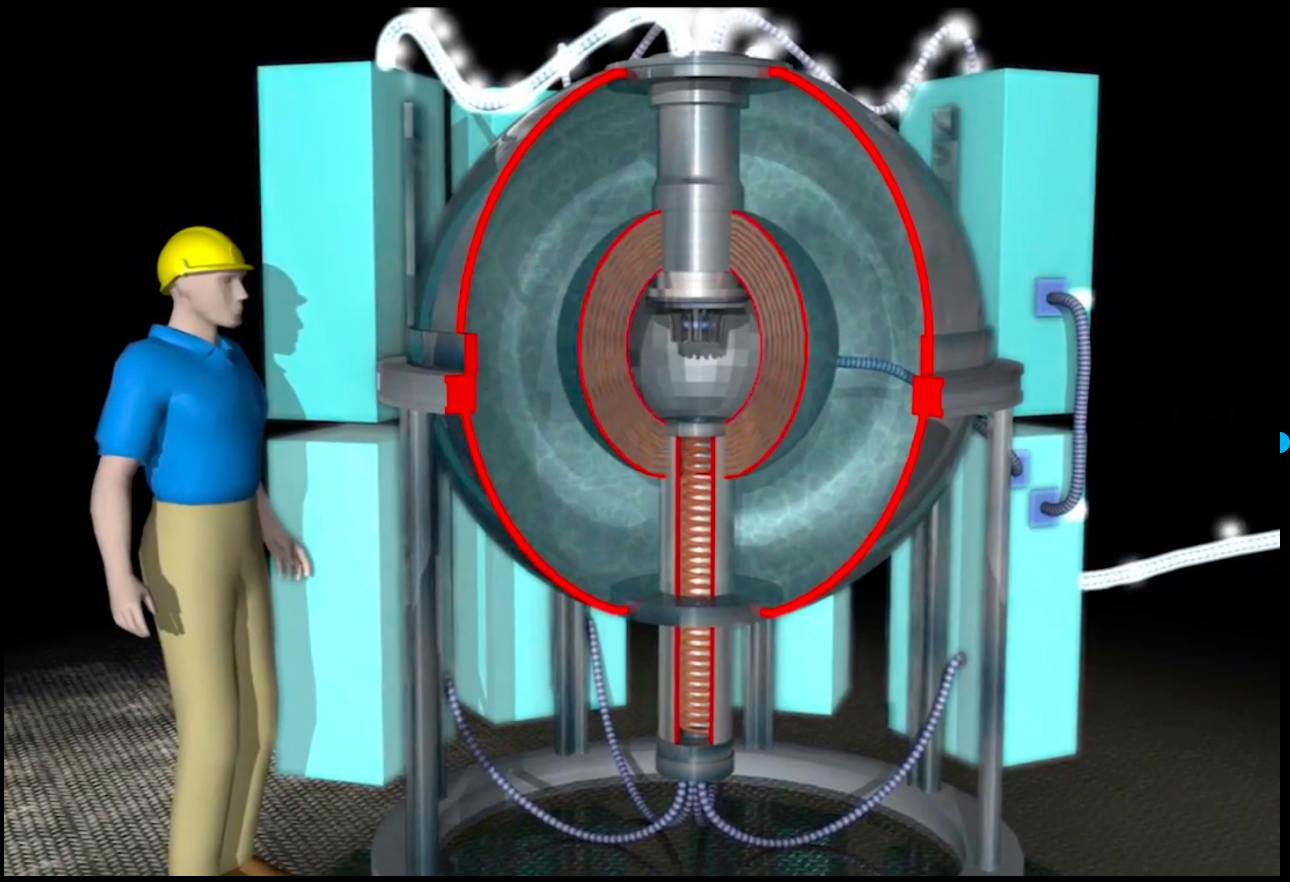
Transition . Laser plasma interactions . Gas discharges . Isotopes . Neutron sources

ABSTRACT

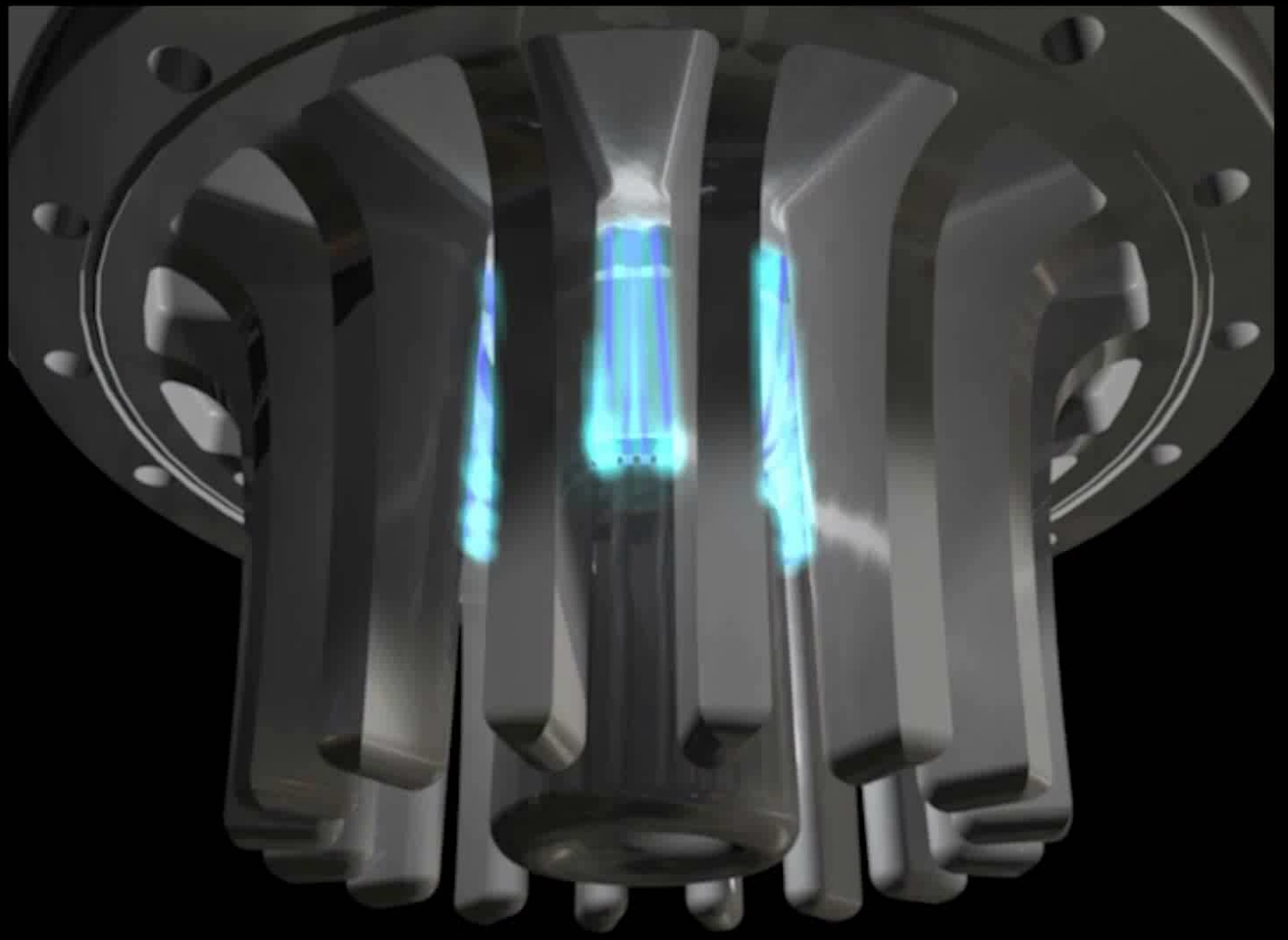
To reduce impurities in the dense plasma focus FF-1 device, we used monolithic tungsten electrodes with pre-ionization. With this new set-up, we demonstrated a three-fold reduction of impurities by mass and a ten-fold reduction by ion number. FF-1 produced a 50% increase in fusion yield over our previous copper electrodes, both for a single shot and for a mean of ten

HIDEN ANALYTICAL

RAISING $2.5 MILLION
$49 MILLION VALUATION



- Direct and Crowd Funding
- $150/share
- Previously Raised: $8 million
- Current offer ends Aug.14

LPPFUSION

FOCUS FUSION – HOW DOES IT WORK?