

# John Verboncoeur

**Associate Dean for Research and Graduate Studies at Michigan State University**

East Lansing, MI, US

John Verboncoeur studies computational plasma physics, electromagnetics, beam physics and high field effects,

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## Biography

Computational plasma physics, electromagnetics, beam physics, high field effects including sheath formation, field emission, multipactor, and breakdown, laser-plasma interactions, plasma edge effects, transport, numerical methods, object-oriented techniques applied to scientific computing, visualization, plasma waves and boundary phenomena. Applications include microwave-beam devices, charged particle beam optics, fusion and other energy applications, accelerators, plasma thrusters, low pressure discharges for plasma processing, and high pressure discharges including plasma display panels and fluorescent lamps.

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## Industry Expertise

Education/Learning

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## Areas of Expertise

Propulsion Technologies

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## Affiliations

Senior Member, IEEE

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## Education

University of California - Berkeley

Ph.D. Nuclear Engineering

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## Accomplishments

Charles K. Birdsall Award, Nuclear and Plasma Sciences Society of the Institute of Electrical and Electronic Engineers  
2022

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