Abstract Submitted
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High-Resolution and Frequency, Printed Miniature Magnetic Probes[1] JAMES PRAGER, TIMOTHY ZIEMBA, KENNETH MILLER, JULIAN PICARD, Eagle Harbor Technologies — Eagle Harbor Technologies, Inc. (EHT) is developing a technique to significantly reduce the cost and development time of producing magnetic field diagnostics. EHT is designing probes that can be printed on flexible PCBs thereby allowing for extremely small coils to be produced while essentially eliminating the time to wind the coils. The coil size can be extremely small when coupled with the EHT Hybrid Integrator, which is capable of high bandwidth measurements over short and long pulse durations. This integrator is currently being commercialized with the support of a DOE SBIR. Additionally, the flexible PCBs allow probes to be attached to complex surface and/or probes that have a complex 3D structure to be designed and fabricated. During the Phase I, EHT will design and construct magnetic field probes on flexible PCBs, which will be tested at the University of Washington's HIT-SI experiment and in EHT's material science plasma reactor.

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James Prager
Eagle Harbor Technologies

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