Building Bridges to Diversity in Physics and Astronomy

A special presentation by Marsico Visiting Scholar

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Thursday, April 29, 12-1 PM, Olin 105 (please feel free to bring your lunch!)



We very briefly review the current status of underrepresented minorities in the physical sciences: The underrepresentation of Black-, Hispanic-, and Native-Americans is an order of magnitude problem. We then describe the Fisk-Vanderbilt Masters-to-PhD Bridge program as a successful model for effective partnerships with minority-serving institutions toward addressing this problem. The program couples targeted recruitment with active retention strategies, and is built upon a clearly defined structure that is flexible enough to address individual student needs while maintaining clearly communicated baseline standards for student performance. A key precept of the program's philosophy is to eliminate passivity in student mentoring; students are deliberately groomed to successfully transition into the PhD program through active involvement in research experiences with future PhD advisers, coursework that demonstrates competency in core PhD subject areas, and frequent interactions with joint mentoring committees. Since 2004 the program has admitted 32 underrepresented minority students (60% female), with a retention rate of 92%. Recent research indicates that minority students are nearly twice as likely as nonminority students to seek a Masters degree en route to the PhD. In essence, the Bridge program builds upon this increasingly important pathway, with a dedicated mentoring process designed to ensure that the Masters-to-PhD transition is a successful one.

Dr. Stassun is the recipient of a CAREER award from NSF and a Cottrell Scholar Award from the Research Corporation. His research on the birth of stars and planetary systems has appeared in the prestigious research journal *Nature*, has been featured on NPR's *Earth & Sky*, and has been published in more than 40 peer-reviewed scholarly journal articles. Dr. Stassun serves on the advisory board for the NSF-funded Institute for Broadening Participation and on the Workforce and Diversity Committee of the Associated Universities for Research in Astronomy.

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