



MORGAN STATE UNIVERSITY

"Growing the Future, Leading the World"

School of Education and Urban Studies

STEM EDUCATION INITIATIVES

MD-CRUSE: MARYLAND COLLABORATIVE FOR RESEARCH IN URBAN STEM EDUCATION

Morgan State University

Roni Ellington, PhD PI

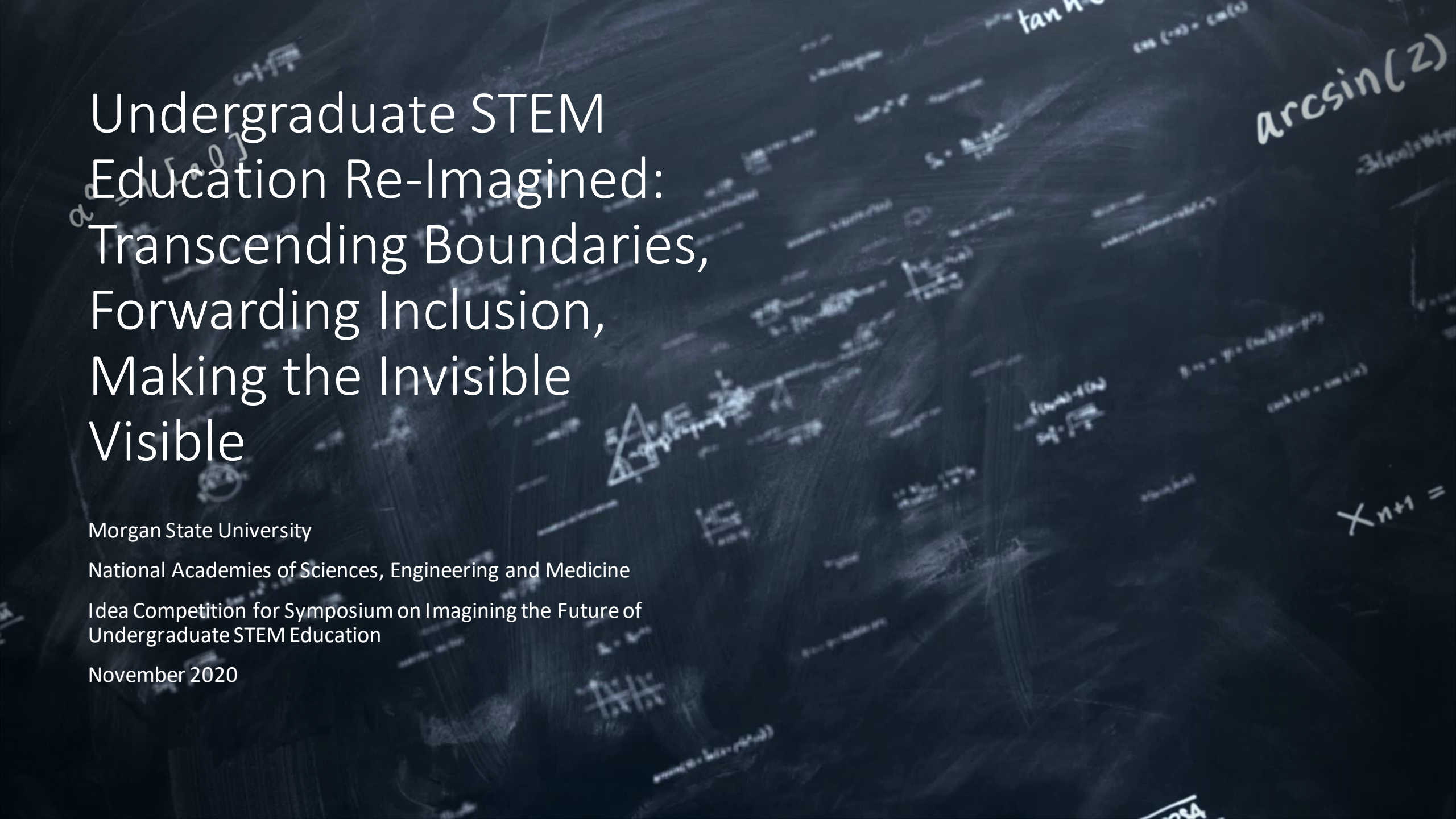
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MD Collaborative for Research in Urban STEM Education (MD-CRUSE)

- The overarching goal of MD-CRUSE is to:
 - i) increase the research competency of STEM and STEM education faculty,
 - ii) build transdisciplinary and inter-institutional STEM research and K-12 educator communities,
 - iii) advance the skills of K-12 STEM educators and
 - iv) generate STEM research findings for driving practice and policy changes in Maryland school districts and the broader STEM community.

Overview

- MD-CRUSE Institute in Research Methods will work with faculty and post-docs in five areas of expertise: STEM education research, STEM disciplinary research, methodology, application and translation with the intent of building faculty capacity in each of these three areas.
- Partnership Focused, MSU, JHU, BERC, 11 Institutions 5 school districts
- Participants
- 15 STEM Fellows (Faculty STEM, STEM ED, Social Scientists)
- 15 STEM Teacher Leaders (district, school level, teachers)
- 1 cohort over the 3 years



Undergraduate STEM Education Re-Imagined: Transcending Boundaries, Forwarding Inclusion, Making the Invisible Visible

Morgan State University

National Academies of Sciences, Engineering and Medicine

Idea Competition for Symposium on Imagining the Future of
Undergraduate STEM Education

November 2020

HBCU Teach: Diversifying the STEM Teacher Workforce

- Partnership between the National Math + Science Initiative, UTeach Institute, and the United Negro College Fund
- Select HBCUs were invited to submit a proposal to design and implement a secondary STEM teacher preparation program using the UTeach program model.

BEARSTeach

(Morgan State University's UTeach Program)

- 5-year Dual Degree Program (BS or BA + Master's Degree)
- Collaboration between SEUS, SCMNS, and SOE
- Multiple entry points to the teacher preparation pathway (i.e., Junior, Senior year or after graduation)
- Early and intensive field experience in schools
- Partnerships with city schools
- Mentoring from public school teachers and faculty engaged in STEM or STEM education research



DMV MSI STEM Alliance

- The overarching goals of the DMV MSI STEM Alliance are to:
 - i) launch an Alliance of social, behavioral, and economic scientists and STEM researchers from 12 Minority Serving Institutions in Delaware, the District of Columbia, Maryland, and Virginia (DMV);
 - ii) convene a virtual STEM Context Matters conference in April 2021 to launch the Alliance;
 - iii) host 3 working group sessions in 2021 and 2022, and an in-person conference in spring 2022 to support networking, cross-fertilization of ideas and grant development; and
 - iv) build support and community across MSIs for grant development in order to increase competitive submissions from MSIs to the NSF's Social, Behavioral, and Economic Sciences (SBE) Directorate.