There is limited research examining the types and features of identity resources leveraged by queer-spectrum STEM students in undergraduate mathematics programs. In the follow paper presentation, I will share research that was conducted with 17 queer-spectrum students at four universities across the United States. Drawing on thematic analysis and identity resource constructs from Nasir (2011), I identified material, relational, and ideational resources that Queer-spectrum students identified as either contributing to or hindering their experiences in STEM. Three cross-cutting findings were identified among the 22 identified identity resources. First, Queer-spectrum students’ participation was fostered through the creation of smaller “safe spaces” and relationships in STEM. Second, Queer-spectrum student’s sense of belonging was supported through resources that fostered academic and social integration (e.g., oSTEM). Third, the lack of positive ideational resources (e.g., view of STEM as white straight male centric) contributed to a lessened sense of both belonging and perceived ability. (Received September 08, 2020)