

Meeting: 1003, Atlanta, Georgia, MAA CP X1, MAA General Contributed Paper Session, I

1003-X1-910 **Abbe H. Herzig*** (aherzig@albany.edu), University at Albany, ED 109, 1400 Washington Avenue, Albany, NY 12222, and **Suzanne K. Damarin** (damarin.1@osu.edu), 101A Ramseyer, 29 W Woodruff Avenue, Columbus, OH 43210. *Increasing Flow in the Pipeline: Flaws in the Argument.*

We will describe flaws with the metaphor of "the pipeline" in discussions of the small numbers of women and people of color who complete the Ph.D. in mathematics. This metaphor poses students as passive participants whose progress through their education is affected only by the forces of fluid dynamics, and does not address why members of some groups leave mathematics in greater proportions than others. Other metaphors may help us envision more effective solutions to the problems of diversity in mathematics. Further, many discussions of attrition from mathematics do not look very far upstream to find leaks. High attrition rates among graduate students are often blamed on poor undergraduate training; struggles in collegiate mathematics are blamed on poor high school training. Rarely is the entire sequence of mathematics education regarded as a coherent system. The recruitment of women and people of color into the academy can be compared to the recruitment of athletes into professional sports. Professional sports organizations seek talent among very young players, and develop that talent until the athletes are mature enough to play professional sports. This approach of looking to fill the pipe upstream is critical to achieving an equitable educational experience in mathematics. (Received September 30, 2004)