A SYNOPTIC VIEW OF THE MAGELLANIC CLOUDS:
VMC, GAIA AND BEYOND

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Chemical Abundances in the Magellanic Stream and Leading Arm

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The Magellanic Stream and its Leading Arm provide an unparalleled opportunity to map out the chemical abundances in a gaseous tidal stream. UV absorption-line studies with the HST/COS spectrograph have confirmed that the two main filaments of the Magellanic Stream have distinct kinematic and chemical properties, one LMC-like and one SMC-like, indicating that both Magellanic Clouds contributed to its origin. In the Leading Arm, only gas with SMC-like chemical abundance patterns has been observed, though with considerable variation in metallicity between different regions, implying a complex creation history. I will discuss these results and their implications on the origin and fate of the Magellanic System.