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The Circumgalactic Medium

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9.3. Final Thoughts

Galaxies were understood as island universes long before astronomers discovered the interstellar gas that forms their stars. The intergalactic medium was added to the big picture with the discovery of QSO absorption lines and the development of the dark-matter cosmology. Because it is much fainter than stars, and much smaller than the IGM, the CGM is arguably the last major component of galaxies to be added but it has nevertheless become a vital frontier. As to *why*, it is clear that much has been learned by viewing galaxy evolution from the perspective of the CGM. The circumgalactic medium can even provoke fascination: might the heavy elements on Earth cycled back and forth through the Milky Way's CGM multiple times before the formation of the Solar System? It appears that the solution to major problems in galaxy formation that are still unsolved will run through this elusive region of the cosmos.

Окологалактическая среда может даже спровоцировать на такой необычный подход: возможно, тяжелые элементы, присутствующие на Земле, уже прокрутились туда и обратно сквозь окологалактическую среду Млечного Пути несколько раз ещё до образования Солнечной системы.

Похоже, что решение основных проблем формирования галактик, которые до сих пор не решены, лежит в этой призрачной области космоса.

- DISCLOSURE STATEMENT

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