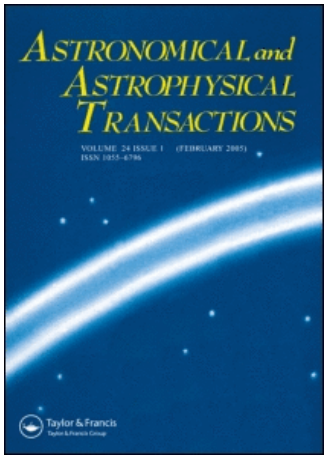

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Dynamics of gaseous disks of spiral galaxies

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DYNAMICS OF GASEOUS DISKS OF SPIRAL GALAXIES†

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Gaseous disks of spiral galaxies may have two kinds of peculiarities. The first of them is a kink on the rotation curve. The point of the kink separates the central region where the angular velocity is constant from the one with differential rotation. In some galaxies (the Milky Way, Mrk 1040, etc.) there are more than one points of bend. The second of them is the jump of the surface density. It is observed in our Galaxy and there are no reasons to think that the latter is peculiar. In this work, we show that taking into account of these peculiarities is very important for building a dynamical picture of the spiral-vortex structure formation in gaseous disks of these galaxies.

KEY WORDS Gas disks – Dynamics, spiral – vortex structure

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