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Thesis Title	<i>The spiral structure of galactic disks and the location of the corotation resonance using kinematic methods.</i>
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Summary	The location of the corotation or equivalently the value of the pattern speed of the spirals is crucial in order to understand the morphology and the dynamics of spiral galaxies. However, there is a difficulty in finding the pattern speed, as it cannot be measured directly by observations. Its value is usually evaluated by correlating the main resonances with some characteristics of the spiral structure, like the end of the spiral arms. An assessment of this hypothesis is done by means of models. Response models are constructed in order to compare the responses of galactic disks rotating with a given value of the pattern speed with photometric observations. However, there have been made some attempts to find corotation directly using kinematic methods. On this thesis, we present such a method, namely the Canzian's method, and we apply it in response models of disk galaxies. Our goal is to understand the potential and the constraints of this method and to propose systems that it can be applied giving reliable results.
Key words	galaxies: kinematics and dynamics, galaxies: spiral, galaxies: structure, ISM: kinematics and dynamics, methods: numerical
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