Dynamics of Quasi-isochronous Storage Rings[*],
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- The longitudinal phase space dynamics of particle motion in quasi-isochronous storage rings is discussed. Sum rules for the strengths of parametric resonances in the quasi-isochronous system are derived. We find that phase and rf voltage error can cause chaos in the rf bucket. Including the damping force, the system can exhibit strange attractors. Region of stability will be discussed.