Hamilton-Ivey Inequality for the Ricci-Bourguignon Flow

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Abstract. The goal of this talk is to present a result concerning solutions of a geometric flow, known as Ricci-Bourguignon Flow, which is useful in comparing the smallest and the biggest curvatures as time goes. Such inequality is known as Hamilton-Ivey Inequality and can be used to prove that certain special solutions have positive sectional curvature. The main obstacle relies on controlling a parameter ρ. The main result says that when this parameter is within $(-\frac{1}{2}, \frac{1}{4})$, the referred estimate is true and the solutions behave as solutions of the Ricci Flow.