

CALIFORNIA INSTITUTE OF TECHNOLOGY
Control and Dynamical Systems

ACM/CDS 202

Problem Set #8

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Reading: Abraham, Marsden, and Ratiu (MTA), Sections 6.1–6.2 (skim), 7.1–7.3

Problems:

1. MTA, 7.1-1: practice with wedge products
2. MTA, 7.1-3: linear dependence and forms
3. MTA, 7.1-6: linear spaces and determinants. You can skip the last part (referring to Example 3.1.8G).
4. MTA, 7.2-2: pullback of volume forms
5. MTA, 7.3-2: differential forms