

Erratum

page 21: The sentence

First we introduce the definition of a Lie group, and then we give some examples (Gilmore [51], Von Westenholz [133], Sattinger and Weaver [99], Choquet-Bruhat et al [17]).

should read

First we introduce the definition of a Lie group, and then we give some examples (Gilmore [51], Von Westenholz [133], Sattinger and Weaver [99], Choquet-Bruhat et al [17], Olver [82]).

page 121: After the sentence

“We begin the discussion by defining the tangent bundle on a differentiable manifold.”

the sentence

“We follow in our presentation Choquet-Bruhat et al [17], Von Westenholz [133] and Olver [82].”

should be added.

page 121: The sentence

“The collection of all tangent vectors to all possible curves passing through a given \mathbf{x} in M is called a tangent space to M at \mathbf{x} and is denoted by $TM|_{\mathbf{x}}$.”

should be replaced by

“The collection of all tangent vectors to all possible curves passing through a given x in M is called a tangent space to M at x (Olver [82]). It is denoted by $TM|_x$.”

page 123: The sentence

“We begin with the basic definition of differential k -forms.”

should read

“We begin with the basic definition of differential k -forms (Flanders [45], Choquet-Bruhat et al [17], Von Westenholz [133], Olver [82]).”

page 209: The sentence

”The solution (provided it exists) of the initial value problem $u(x, 0) = f(x)$ will determine the group action”

should read

”The solution (provided it exists) of the initial value problem $u(x, 0) = f(x)$ will determine the group action (Olver [82])”

page 210:

The sentence

“Several difficulties are immediately apparent.”

should read

“Several difficulties are immediately apparent (Olver [82]).”