

Appendix A

Tables

	\hat{x}	\hat{y}	\hat{z}
\hat{r}	$+\sin\theta\cos\phi$	$+\sin\theta\sin\phi$	$+\cos\theta$
$\hat{\theta}$	$+\cos\theta\cos\phi$	$+\cos\theta\sin\phi$	$-\sin\theta$
$\hat{\phi}$	$-\sin\phi$	$+\cos\phi$	0
$\hat{\rho}$	$+\cos\phi$	$+\sin\phi$	0

Table A.1 Matrix elements $\hat{c}^i \cdot \hat{e}^j$ and $\hat{s}^i \cdot \hat{e}^j$.

	\hat{r}	$\hat{\theta}$	$\hat{\phi}$
$\partial/\partial r$	0	0	0
$\partial/\partial\theta$	$+\hat{\theta}$	$-\hat{r}$	0
$\partial/\partial\phi$	$+\hat{\phi}\sin(\theta)$	$+\hat{\phi}\cos\theta$	$-\hat{\rho} = -\hat{r}\sin\theta - \hat{\theta}\cos\theta$

Table A.2 The derivatives $\partial\hat{s}^j/\partial s^i$.