

## References for chiral lattice QCD

The following references are meant as a complement to the lectures; they should be used as a guidance, and as a source for the details of the calculations that can not be presented in the lectures. Clearly they do not exhaust the literature on the subject.

### **U(1) problem**

E. Witten, Nucl. Phys. **B156**, 269 (1979)  
G. Veneziano, Nucl. Phys. **B159**, 213 (1979)

### **Doubling problem**

L.H. Karsten and J. Smit, Nucl. Phys. **B183**, 103 (1981)

### **Ward identities with Wilson fermions**

M. Bochicchio et al., Nucl. Phys. **B262**, 331 (1985)

### **Chiral symmetry on the lattice**

H.B. Nielsen and M. Ninomyia, Phys. Lett. **105B**, 219 (1981)  
P.H. Ginsparg and K.G. Wilson, Phys. Rev. **D25**, 2649 (1982)  
D.B. Kaplan, Phys. Lett. **B288**, 342 (1992)  
R. Narayanan and H. Neuberger, Phys. Rev. Lett. **71**, 3251 (1993)  
R. Narayanan and H. Neuberger, Nucl. Phys. **B412**, 3251 (1994)  
H. Neuberger, Phys. Lett. **B417**, 141 (1997)

### **Ward identities with overlap fermions**

P. Hasenfratz, Nucl. Phys. **B525**, 401 (1998)  
Y. Kikukawa and A. Yamada, Nucl. Phys. **B547**, 413 (1997)

### **U(1) problem on the lattice**

P. Hasenfratz et al., Phys. Lett. **B427**, 125 (1998)  
L. Giusti et al., Nucl. Phys., **B628**, 234 (2002)  
L. Del Debbio et al, Phys, Rev. Lett. **94**, 032003 (2005)

### **Domain Wall fermions**

V.A. Rubakov and M. Shaposhnikov, Phys. Lett. **B125**, 136 (1998)  
Y. Shamir, Nucl. Phys. **B406**, 50 (1993)

### **Ward identities with Domain Wall fermions**

V. Furman and Y. Shamir, Nucl. Phys. **B439**, 54 (1995)