Acknowledgments

The work presented in this Thesis wouldn't have been possible without the collaboration of my colleague and friend Simona Cocco, to whom it is addressed my first acknowledgment.

A large part of the work has been done at the Physics Laboratory of the Ecole Normale Supérieure de Lyon, under the supervision of Prof. Michel Peyrard, who is very gratefully acknowledged for his fundamental help.

I sincerely thank my supervisor Prof. Stefano Ruffo for having followed all phases of this research with encouraging and helpful attention.

All people who, in different ways, have given their contribution are also gratefully acknowledged. Among the others, a special thank is due to Prof. Ludmila Yackushevich and to Dott. Pietro Lió for helpful and friendly discussions.

I sincerely hope that all friends who have sustained me during these years already know my feelings. Nevertheless, I like to formally acknowledge here all of them once more.

Lajatico, 25 12 1998.