

# Contents

## Volume 2

Preface .....	v
Acknowledgements .....	vii
Arne Beurling in memoriam, by Lars Alfors and Lennart Carleson .....	ix
Publications of Arne Beurling .....	xvi

### Publications on Harmonic Analysis

[3] Analyse de la loi asymptotique de la distribution des nombres premiers généralisés. I .....	1
[4] Sur les intégrales de Fourier absolument convergentes et leur application à une transformation fonctionnelle .....	/ 39
[6] Un théorème sur les fonctions bornées et uniformément continues sur l'axe réel	61
[7] Sur quelques formes positives avec une application à la théorie ergodique ...	71
[8] Sur la composition d'une fonction sommable et d'une fonction bornée .....	88
[10] Sur une classe de fonctions presque-périodiques .....	90
[11] On the spectral synthesis of bounded functions .....	93
[14] Sur les spectres des fonctions .....	125
[16] An extremal property of the Riemann zeta-function .....	147
[17] On a closure problem .....	153
[21] A theorem on functions defined on a semi-group .....	157
[22] (with H. Helson) Fourier-Stieltjes transforms with bounded powers .....	162
[24] (with A. E. Livingston) A theorem on duality mappings in Banach spaces ...	169
[25] A closure problem related to the Riemann zeta-function .....	176
[28] (with J. Deny) Espaces de Dirichlet. I. Le cas élémentaire .....	179
[29] (with J. Deny) Dirichlet spaces .....	201
[30] An automorphism of product measures .....	209
[33] Notes on Dirichlet series .....	221
[34] Construction and analysis of some convolution algebras .....	229
[35a] Analyse spectrale de pseudomesures .....	261
[35b] Analyse spectrale de pseudomesures .....	265
[36] Analyse spectrale de pseudomesures. Sur les mesures préhausdorffiennes dans l'analyse harmonique .....	269
[37] Analyse harmonique de pseudomesures. Intégration par rapport aux pseudo-mesures .....	273
[38] Analyse harmonique de pseudomesures. Intégration par rapport aux pseudo-mesures .....	277
[39] Analyse harmonique de pseudomesures. Intégration .....	281

[40] A critical topology in harmonic analysis on semigroups .....	285
[42] Local harmonic analysis with some applications to differential operators ....	299
[44] On analytic extension of semigroups of operators .....	317
Quotients des fonctions définies-négatives (par Jean-Pierre Kahane, d'après Beurling et Deny), Seminaire Bourbaki, 19e annee, 1966, n°. 315. ....	333

### Mittag-Leffler Lectures on Harmonic Analysis (1977–1978)

Chapter IV. Balayage of Fourier-Stieltjes Transforms .....	341
1. General theory .....	341
2. Balayage for an interval on $R^1$ .....	345
3. Linear balayage operators .....	348
Chapter V. Interpolation for an Interval on $\mathbb{R}^1$ .....	351
1. A density theorem .....	351
2. Remarks on the general problem .....	359
3. Minimal extrapolation .....	359

*Chapters I, II, III, and VI appear in Volume 1*

### Selected Seminars on Harmonic Analysis, University of Uppsala, 1938–1952

3. An inequality. A closure problem .....	367
4. A general version of the Hardy-Littlewood method for zeros of $\zeta(1/2 + it)$ .....	368
5. On functions with a spectral gap .....	370
7. The decay of a function and its Fourier transform .....	372
9. An inequality of Hardy for Fourier integrals .....	373
10. On uniformity continuous functions on the real axis .....	375
11. On the completeness of $\{\psi(nt)\}$ on $L^2(0, 1)$ .....	378
12. On translation of functions .....	380
13. On the spectra of associated functions .....	383
16. Almost periodic functions and additive number theory .....	385

*Selected Seminars on Complex Analysis appear in Volume 1*

Permissions .....	389
-------------------	-----