

## Name Index

An asterisk indicates a correspondent, the page references to the letters being shown in italics.

- Airey, J.R. 190, 213
- \* Aitken, A.C. *1*
- Allan, F.E. 296
- 'Alumnus' 348
- Anscombe, F.J. 195
- Appleton, E.V. 351
- Aspin, A.A. 29
- \* Baker, J.R. *341*
- Ball, W.W.R. 334
- \* Barnard, G.A. 2, 214, 240
- \* Bartlett, M.S. *45*, 70, 183, 214, 217, 220, 233, 242, 294, 349
- Bayes, T. *8*, 20, 40, 167, 179, 221, 233
- Beaven, E.S. *271*
- \* Behrens, W.U. *52*, *53*, *144*, *177*, *183*, *220*, 226, 243, 349
- Bernoulli, D. *23*, 172
- Bernoulli, J. *320*
- Bernstein, S. *135*
- Bertelsen *316*
- Birge, R.T. *80*, *118*
- Blackwell, D. *20*
- Blakeman, J. *264*
- \* Bliss, C.I. *56*, *86*, *245*
- Bodmer, W.F. *111*
- Boole, G. *26*, *170*
- Bose, R.C. *249*
- \* Box, G.E.P. *219*, *250*
- Braithwaite, R.B. *19*
- Brewster, D. *334*
- Bridgman, P.W. *339*
- Broad, C.D. *152*
- \* Buckland, W.R. *307*
- \* Burros, O.K. *57*
- \* Campbell, N. *58*
- Cayley, A. *311*, *321*
- Chrystal, G. *170*
- Church, A.E.R. *316*
- \* Clark, W.G. *Le G.* *333*
- \* Cochran, W.G. *35*, *251*, *258*, *281*, *294*, *325*
- \* Corbière, H. *346*
- \* Cornish, E.A. *199*, *252*
- Cournot, A. *27*, *61*
- Cox, G.M. *258*, *281*
- Craig, C.C. *315*, *319*
- Cramer, H. *331*
- Creasy, M.A. *10*, *86*
- Crew, F.A.E. *318*
- Crowther, C.G. *54*
- Cutler, D.W. *318*
- Czuber, E. *319*
- \* Daniels, H.E. *62*, *217*, *253*
- \* Darmois, G. *64*
- Dee, P.I. *350*
- De Lury, D. *115*
- \* Deming, W.E. *80*, *118*, *137*, *237*
- de Moivre, A. *26*, *80*, *171*, *221*, *233*, *320*
- De Morgan, A. *9*, *170*
- Diananda, P.H. *232*
- Dingle, H. *162*
- Dingwall, E.J. *337*
- Douglas, N. *310*
- \* Dufrénoy, H.D. *307*
- Duncan, D.B. *250*
- Eddington, A.S. *150*, *161*
- \* Edelstam, C. *254*
- Eden, T. *266*, *295*
- Edgeworth, F.Y. *123*, *139*, *219*
- Einstein, A. *163*
- \* Eisenhart, C. *308*
- Ellis, R.L. *61*, *168*
- Fechner, G.T. *168*, *178*
- Federer, W.T. *257*, *280*
- Feller, W. *206*, *239*
- Fermat, P. *233*
- Fiedler *311*
- \* Fieller, E.C. *10*, *85*
- Filon, L.N.G. *123*, *139*
- \* Finney, D.J. *88*, *255*, *327*
- \* Fisher, A. *310*, *316*
- Fokker, A.H.G. *261*
- Ford, E.B. *355*

- \* Fraser, D.A.S. 105, 106, 188, 199, 215
- \* Fréchet, M. 118, 259
- \* Frisch, R. 305, 314
- Gaddum, J.H. 86
- Galton, F. 326
- Gani, J. 350
- Gauss, K.F. 1, 41, 125, 137, 179, 237, 286, 315
- George, R.F. 8
- Gini, C. 122
- Girshick, M.A. 20
- Good, I.J. 137
- \* Goossens, L. 264
- Gosset, W.S. (see 'Student')
- Gram, J.P. 311
- \* Grant, R. 317
- \* Gray, H. 138
- \* Greenwood, M. 318
- Grove, C.C. 312
- Hall, A.D. 273
- Hall, P. 350
- Hamburger, H. 191
- Hardy, G.H. 350
- Harris, J.A. 322
- \* Harrod, R.F. 140, 333
- Hartley, H.O. 29, 240
- Hastings, K. 110
- \* Heckstall-Smith, H.W. 265, 319, 333
- Heincke 272
- Helmut, F.R. 300, 319, 326
- \* Hick, W.E. 143
- Hilbert, D. 39
- Hodge, W.V.D. 350
- \* Hotelling, H. 144, 219, 247, 310, 314, 319, 324, 326, 327
- Hume, D. 27
- \* Immer, F.R. 266
- \* Irwin, J.O. 22, 145, 267, 302
- \* James, A.T. 147
- James, F.E. 295
- \* James, G.S. 148, 242
- \* Jeffreys, H. 80, 149, 184, 239, 267, 349
- Johnson, W.E. 155, 170
- Jones, L. 120
- \* Jordan, C. 149

Kallianpur, G. 196  
 \* Kendall, M.G. 180, 196, 240, 267, 307,  
 321

- \* Keyfitz, N. 185
- Keynes, J.M. 56, 140, 170, 188, 238, 334
- King, P.D. 247
- \* Kislovsky, D.A. 272
- Kolmogoroff, A. 80, 239, 261, 331
- \* Koopmans, T. 187, 305, 328
- Koshal, R.S. 165, 353
- Kuillback, S. 287
- \* Kyburg, H.E. 112, 187, 215
- Laplace, P.S. 1, 9, 41, 137, 170, 314
- Leibnitz, G.W. 233, 334
- Lévy, P. 190
- Linder, A. 22
- Lindley, D.V. 36, 192
- Locke, J. 27
- Love 308
- \* McGuigan, F.J. 321
- Mach, E. 163
- McKay, A.T. 189
- Mackenzie, W.A. 267
- \* McKie, D. 334
- \* Maclean, J. 330, 335
- \* MacMahon, P.A. 273
- \* Mahalanobis, P.C. 22, 139, 249, 323, 330
- Maskell, E.J. 212
- \* Mather, K. 277, 286, 330
- Mauldon, J.G. 10, 18, 108, 215
- Mercer, W.B. 273
- \* Michie, D. 278
- Mises, R. von 135
- Mitchison, M. 278
- Molina, L. 136
- Montesquieu, C.L. 188
- Montmort, P. De 80, 221, 233
- More, L.T. 334
- Morgan, T.H. 291
- Mourant, A.E. 255
- \* Needham, J. 336
- \* Nelder, J.A. 258, 280
- Newton, I. 334, 337
- \* Neyman, J. 2, 9, 23, 56, 101, 133, 138, 144, 180, 186, 189, 194, 211, 213, 246, 258
- \* Nixon, W.L.B. 322
- Owen, A.R.G. 18, 209, 220
- Pascal, B. 233
- Pearson, E.S. 2, 9, 29, 56, 101, 180, 187, 190, 240, 246, 270, 295

- Pearson, K. 123, 138, 164, 189, 272, 287, 299, 312, 318, 326, 352
- Peirce, B. 286
- Peters, C.A.F. 237, 326
- Pitman, E.J.G. 211
- Planck, M.K.E.L. 261
- \* Prescott, J.A. 283
- \* Quenouille, M.H. 44, 192, 215
- Ramsey, F.P. 152, 159, 167, 350
- \* Rao, C.R. 112, 195, 285
- Ratcliffe, J.A. 350
- \* Richardson, L.F. 352
- \* Rider, P.R. 286
- \* Rietz, H.L. 287
- Romains, J. 347
- \* Romanovsky, V.I. 16, 200, 287, 322
- \* Rothschild, N.M.V. 354, 356
- Roy, S.N. 219
- Russell, B. 168, 350
- Russell, J. 326
- \* Salaman, R.N. 337
- \* Satakopan, V. 289
- \* Savage, L.J. 202, 218, 232, 239
- \* Sayers, W.H. 289
- Segal, J.E. 232
- \* Sheffield, F.D. 212
- \* Sheppard, P.M. 355
- Sheppard, W.F. 125, 139
- \* Shewhart, W.A. 212, 311
- Slutsky, E. 201
- \* Smith, H.F. 213, 285, 330
- \* Snedecor, G.W. 245, 294, 319, 323
- \* Sprott, D.A. 44, 105, 188, 215
- Stevens, W.L. 213, 254, 349
- 'Student' (= W.S. Gosset) 52, 80, 169, 175, 183, 237, 268, 300, 308
- Sukhatme, P.V. 177
- \* Summerby, R. 296
- \* Zeller, A. 306

- Tchouproff, A.A. 316
- Thiele, T.N. 311, 314, 320
- \* Thom, H.C.S. 331
- Thornton, H.G. 267
- \* Thorpe, W.H. 355
- \* Tippett, L.H.C. 267, 295, 323
- Todhunter, L. 168
- Treloar, A.E. 237, 266
- \* Tukey, J. 207, 218, 220, 239, 250
- Venn, J.A. 152, 170
- \* Villars, D.S. 297
- Voltaire, F.M.A. de 188
- Wald, A. 23, 233
- \* Walker, G.T. 332
- \* Walker, H.M. 298
- \* Wallis, W.A. 315
- Weber, E.H. 168, 178
- Welch, B.L. 29, 220, 242, 258
- Whipple 289
- Whitehead, A.N. 168
- Whittaker, E.T. 2
- Wilder, M.A. 237, 266
- \* Wilks, S.S. 32, 57, 206, 233, 294, 299
- Williams, E.T. 8
- Williams, R.M. 206
- Wilson, A.H. 349
- \* Wilson, E.B. 88, 144, 214, 237, 304, 339
- \* Wishart, J. 294, 299, 311, 350, 355
- Wisniewski, J. 122
- Wittgenstein, L. 168, 333
- Woo, T.L. 323
- \* Wood, E.C. 305
- Wrinch, D.M. 149
- \* Yates, F. 32, 240, 266, 277, 352, 356
- Yule, G.U. 43, 295, 353

## *Subject Index*

- acceptance procedures 9, 186, 214  
analysis of covariance 294  
analysis of variance 247, 252, 279, 295, 306,  
    322, 324, 326  
significance tests  
    distributional problem 299–304  
    tabulation 256  
ancillary information 66, 183
- Bayes' postulate (*see inverse probability*)  
Behrens' *d* 51, 54, 64, 89, 107, 144, 147, 149,  
    183, 207, 220, 232, 241  
best critical region 191  
biometrists  
    and biologists 333  
    status in joint work 354–60
- Cambridge Philosophical Society  
    Fisher's resignation 349  
card matching 337  
chi-squared  
    as test of goodness of fit 265  
    subnormal 267  
coefficient of racial likeness 272  
composite hypothesis 148, 210  
confidence intervals 181, 187  
confluence analysis 305  
consistency 240, 328  
    and lack of bias 58, 196  
correlation  
    and tests of significance 259–64  
    intraclass 322  
    multivariate case 215  
    simultaneous distribution 147  
ratio  
    and analysis of variance 323  
    serial 253  
cumulants  
    terminology 314, 320
- discriminant function 285, 299  
    early ideas 272  
distribution theory  
    geometric method 138  
    methods 287, 328
- estimation  
    consistent 57
- exhaustive 65, 183  
experimental design 250  
role of statistics 289
- fiducial  
    argument 127  
    introduction 119, 124
- distribution  
    and Bayesian inference 233  
    correlation coefficient 105, 107–17, 199,  
        215  
    pivotal quantity 44, 108, 199, 218, 220  
    weighted normal means, asymptotic ex-  
        pansion 104
- limits  
    and Maskell 212  
    for ratio of means 86  
probability 80, 95, 101, 128, 187, 221, 239,  
    329
- Fokker–Planck diffusion equation 261
- fourfold tables  
    Barnard's views 2–5  
    fixed margins 88, 144, 214, 239  
    in business statistics 330  
    use of one or two tails 88, 239
- Galton Laboratory 318
- geometric method  
    and general regression 286  
    correlation coefficient 287
- half-drill strips  
    and randomization 271
- harmonic analysis 289
- hypotheses  
    choice of 333  
null  
    origin of term 321  
    implications 265
- information  
    amount of 77, 280  
        and small samples 47  
        and experimental design 257, 280
- intraclass correlation 322
- inverse probability 170  
    and fiducial probability 119, 121, 125  
    and maximum likelihood 179, 200

}

- latin squares 269, 273
  - combinatorial problems 276
  - Knut Vik 241
- likelihood 6
  - contrasted with probability 92, 151, 215
- maximum likelihood 255
  - approximation by iteration 65
  - early use 125, 286
- Mendelian ratios 202
- method of moments
  - Koshal and Pearson ¶64, 352
- Neyman-Pearson theory 101, 144, 147, 180, 182, 189, 194, 246
  - repeated sampling from same population 145, 214
- Nile, problem of the 70, 202-11
- non-parametric tests of significance 210, 327
- orthogonal polynomials 289
- probability
  - a priori 219
  - frequency theory 61, 137, 140, 142, 151
  - Keynes' definition 140, 170, 238
  - nature of 56, 58, 80
  - one kind only 221
  - reference set requirements 215
    - relevant reference set 239
  - probability integral (normal) 190, 213
  - psychical research
    - and statistical method 337-40
- quality control 212
- randomization
  - in experimentation 242, 269-71
- regression
  - coefficient
    - as used by economists 305
    - multiple 284
    - simple, distribution 214
- science
  - and morality 347
  - in China 336
- scientific research
  - and contribution of biometricalians 356
  - and honesty 353
- and social responsibility 355
  - and the future 347
  - correction of mistakes 356
  - freedom in 343
  - organization of 62, 341
- scores
  - for ranked data 246, 251, 305
- SMRW*
  - celebration of 25th anniversary 317, 325
- specification
  - problems of 158
- statistical science
  - and mathematicians 237, 327
  - and parapsychology 337, 339
  - purpose 331
  - 'Student's' contribution 307
- statistical tables
  - and electronic computers 254
- statisticians
  - and probabilists 331
  - objectives 256, 331
- 'Student's' *t*
  - history 307
- sufficiency
  - criterion of 8, 125
- sufficient statistics
  - distribution 187
- teaching of statistics 330
- terminology 307, 313, 321
- tests of significance
  - non-normal distributions 266
  - combination of probabilities 264
  - confused with acceptance procedures 186
  - justification by randomization 266
  - non-parametric 327
    - use in rejecting hypotheses 265
  - theory of estimation 158
  - time series 305
  - transformation
    - angular 245
    - of ranked data 249, 251, 305
- variance
  - components 250
  - homogeneity of estimates 297
  - ratio
    - symbolism 319, 323