



Gunnar Carlsson

Ann and Bill Swindells Professor, Emeritus
Mathematics

 Curriculum Vitae available Online

Bio

BIO

Dr. Carlsson has been a professor of mathematics at Stanford University since 1991. In the last ten years, he has been involved in adapting topological techniques to data analysis, under NSF funding and as the lead PI on the DARPA “Topological Data Analysis” project from 2005 to 2010. He is the lead organizer of the ATMCS conferences, and serves as an editor of several Mathematics journals

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Mathematics
- Member, Institute for Computational and Mathematical Engineering (ICME)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Scientific Advisory Board, WASP initiative, Wallenberg Foundation, Sweden (2018 - present)

PROFESSIONAL EDUCATION

- Ph.D., Stanford University , Mathematics (1976)
- B.A., Harvard University , Mathematics (1973)

Publications

PUBLICATIONS

- **Topological data analysis and topological deep learning beyond persistent homology: a review.** *Artificial intelligence review*
Su, Z., Liu, X., Hamdan, L. B., Maroulas, V., Wu, J., Carlsson, G., Wei, G. W.
2026; 59 (2)
- **Topological data analysis and topological deep learning beyond persistent homology: a review** *ARTIFICIAL INTELLIGENCE REVIEW*
Su, Z., Liu, X., Hamdan, L., Maroulas, V., Wu, J., Carlsson, G., Wei, G.
2025; 59 (2)
- **Topological Data Analysis in the Assessment of Coronary Atherosclerosis: A Comprehensive Narrative Review.** *Mayo Clinic proceedings. Digital health*
Singh, Y., Hathaway, Q. A., Farrelly, C., Budoff, M. J., Erickson, B., Collins, J. D., Blaha, M. J., Leiner, T., Lopez-Jimenez, F., Rozenblit, J., Sarkar, D., Carlsson, G.
2025; 3 (2): 100199
- **Topological Data Analysis Reveals a Subgroup of Luminal B Breast Cancer** *IEEE OPEN JOURNAL OF ENGINEERING IN MEDICINE AND BIOLOGY*
Rostami, Z., Fooshee, D., Carlsson, G., Subramaniam, S.
2025; 6: 465-471

- **Position: Topological Deep Learning is the New Frontier for Relational Learning.** *Proceedings of machine learning research*
Papamarkou, T., Birdal, T., Bronstein, M., Carlsson, G., Curry, J., Gao, Y., Hajij, M., Kwitt, R., Liò, P., Di Lorenzo, P., Maroulas, V., Miolane, N., Nasrin, et al
2024; 235: 39529-39555
- **Advancing Precision Medicine: Algebraic Topology and Differential Geometry in Radiology and Computational Pathology.** *Laboratory investigation; a journal of technical methods and pathology*
Levenson, R. M., Singh, Y., Rieck, B., Hathaway, Q. A., Farrelly, C., Rozenblit, J., Prasanna, P., Erickson, B., Choudhary, A., Carlsson, G., Deepa, D.
2024: 102060
- **The Role of Geometry in Convolutional Neural Networks for Medical Imaging.** *Mayo Clinic proceedings. Digital health*
Singh, Y., Farrelly, C., Hathaway, Q. A., Choudhary, A., Carlsson, G., Erickson, B., Leiner, T.
2023; 1 (4): 519-526
- **Equivariant algebraic K-theory, G-theory and derived completions** *ADVANCES IN MATHEMATICS*
Carlsson, G., Joshua, R.
2023; 430
- **Topological data analysis in medical imaging: current state of the art.** *Insights into imaging*
Singh, Y., Farrelly, C. M., Hathaway, Q. A., Leiner, T., Jagtap, J., Carlsson, G. E., Erickson, B. J.
2023; 14 (1): 58
- **Topological convolutional layers for deep learning** *Journal of Machine Learning Research*
Love, E. R., Filippenko, B., Maroulas, V., Carlsson, G.
2023; 24: 35
- **Topological Convolutional Layers for Deep Learning** *JOURNAL OF MACHINE LEARNING RESEARCH*
Love, E. R., Filippenko, B., Maroulas, V., Carlsson, G.
2023; 24
- **PREFACE** *FOUNDATIONS OF DATA SCIENCE*
Carlsson, G., Hess, K., Memoli, F., Rabadan, R., Skraba, P.
2022; 4 (4): I
- **Comparative study of left atrium epicardial fat tissue pattern using persistent homology approach.** *BMC research notes*
Deepa, D., Singh, Y., Mansoor, W., Hu, W., Paul, R., Carlsson, G. E.
2022; 15 (1): 299
- **Approximating absolute Galois groups** *JOURNAL OF PURE AND APPLIED ALGEBRA*
Carlsson, G., Joshua, R.
2022; 226 (9)
- **Topological data analysis reveals genotype-phenotype relationships in primary ciliary dyskinesia.** *The European respiratory journal*
Shoemark, A. n., Rubbo, B. n., Legendre, M. n., Fassad, M. R., Haarman, E. G., Best, S. n., Bon, I. C., Brandsma, J. n., Burgel, P. R., Carlsson, G. n., Carr, S. B., Carroll, M. n., Edwards, et al
2021
- **Robust Hierarchical Clustering for Directed Networks: An Axiomatic Approach*** *SIAM JOURNAL ON APPLIED ALGEBRA AND GEOMETRY*
Carlsson, G., Memoli, F., Segarra, S.
2021; 5 (4): 675-700
- **Topological methods for data modelling** *NATURE REVIEWS PHYSICS*
Carlsson, G.
2020
- **Fibers of Failure: Classifying Errors in Predictive Processes** *ALGORITHMS*
Carlsson, L. S., Vejdemo-Johansson, M., Carlsson, G., Jonsson, P. G.
2020; 13 (6)
- **Excision in equivariant fibred G-theory** *ANNALS OF K-THEORY*

- Carlsson, G., Goldfarb, B.
2020; 5 (4): 721–56
- **A Topology Layer for Machine Learning**
Brueel-Gabrielsson, R., Nelson, B. J., Dwaraknath, A., Skraba, P., Guibas, L. J., Carlsson, G.
edited by Chiappa, S., Calandra, R.
ADDISON-WESLEY PUBL CO.2020: 1553–62
 - **Bounded G-theory with fibred control** *JOURNAL OF PURE AND APPLIED ALGEBRA*
Carlsson, G., Goldfarb, B.
2019; 223 (12): 5360–95
 - **Parametrized homology via zigzag persistence** *ALGEBRAIC AND GEOMETRIC TOPOLOGY*
Carlsson, G., de Silva, V., Kalisnik, S., Morozov, D.
2019; 19 (2): 657–700
 - **Towards a new approach to reveal dynamical organization of the brain using topological data analysis** *NATURE COMMUNICATIONS*
Saggar, M., Sporns, O., Gonzalez-Castillo, J., Bandettini, P. A., Carlsson, G., Glover, G., Reiss, A. L.
2018; 9: 1399
 - **Hierarchical clustering of asymmetric networks** *ADVANCES IN DATA ANALYSIS AND CLASSIFICATION*
Carlsson, G., Memoli, F., Ribeiro, A., Segarra, S.
2018; 12 (1): 65–105
 - **Admissible Hierarchical Clustering Methods and Algorithms for Asymmetric Networks** *IEEE TRANSACTIONS ON SIGNAL AND INFORMATION PROCESSING OVER NETWORKS*
Carlsson, G., Memoli, F., Ribeiro, A., Segarra, S.
2017; 3 (4): 711–27
 - **Uncovering precision phenotype-biomarker associations in traumatic brain injury using topological data analysis.** *PLoS one*
Nielson, J. L., Cooper, S. R., Yue, J. K., Sorani, M. D., Inoue, T., Yuh, E. L., Mukherjee, P., Petrossian, T. C., Paquette, J., Lum, P. Y., Carlsson, G. E., Vassar, M. J., Lingsma, et al
2017; 12 (3)
 - **Representable Hierarchical Clustering Methods for Asymmetric Networks**
Carlsson, G., Memoli, F., Ribeiro, A., Segarra, S.
edited by Palumbo, F., Montanari, A., Vichi, M.
SPRINGER INTERNATIONAL PUBLISHING AG.2017: 83–95
 - **Symmetric and r-symmetric tropical polynomials and rational functions** *JOURNAL OF PURE AND APPLIED ALGEBRA*
Carlsson, G., Verovsek, S. K.
2016; 220 (11): 3610-3627
 - **On modules over infinite group rings** *INTERNATIONAL JOURNAL OF ALGEBRA AND COMPUTATION*
Carlsson, G., Goldfarb, B.
2016; 26 (3): 451-466
 - **The ring of algebraic functions on persistence barcodes** *Homology, homotopy, and applications*
Adcock, A., Carlsson, E., Carlsson, G.
2016; 18 (1): 381-402
 - **Topological data analysis for discovery in preclinical spinal cord injury and traumatic brain injury** *NATURE COMMUNICATIONS*
Nielson, J. L., Paquette, J., Liu, A. W., Guandique, C. F., Tovar, C. A., Inoue, T., Irvine, K., Gensel, J. C., Kloke, J., Petrossian, T. C., Lum, P. Y., Carlsson, G. E., Manley, et al
2015; 6
 - **NUDGED ELASTIC BAND IN TOPOLOGICAL DATA ANALYSIS** *TOPOLOGICAL METHODS IN NONLINEAR ANALYSIS*
Adams, H., Atanasov, A., Carlsson, G.
2015; 45 (1): 247-272

- **Evasion paths in mobile sensor networks** *INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH*
Adams, H., Carlsson, G.
2015; 34 (1): 90-104
- **Topological methods reveal high and low functioning neuro-phenotypes within fragile X syndrome.** *Human brain mapping*
Romano, D., Nicolau, M., Quintin, E., Mazaika, P. K., Lightbody, A. A., Cody Hazlett, H., Piven, J., Carlsson, G., Reiss, A. L.
2014; 35 (9): 4904-4915
- **Classification of hepatic lesions using the matching metric** *COMPUTER VISION AND IMAGE UNDERSTANDING*
Adcock, A., Rubin, D., Carlsson, G.
2014; 121: 36-42
- **A Klein-Bottle-Based Dictionary for Texture Representation** *INTERNATIONAL JOURNAL OF COMPUTER VISION*
Perea, J. A., Carlsson, G.
2014; 107 (1): 75-97
- **Topological pattern recognition for point cloud data** *ACTA NUMERICA*
Carlsson, G.
2014; 23: 289-368
- **Topology of viral evolution** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Chan, J. M., Carlsson, G., Rabadan, R.
2013; 110 (46): 18566-18571
- **BIG-DATA VISUALIZATION FOR TRANSLATIONAL NEUROTRAUMA**
Nielson, J., Inoue, T., Paquette, J., Lin, A., Sacramento, J., Liu, A. W., Guandique, C. F., Irvine, K., Gensel, J. C., Beattie, M. S., Bresnahan, J. C., Manley, G. T., Carlsson, et al
MARY ANN LIEBERT, INC.2013: A61–A62
- **Persistent Topology and Metastable State in Conformational Dynamics** *PLOS ONE*
Chang, H., Bacallado, S., Pande, V. S., Carlsson, G. E.
2013; 8 (4)
- **Classifying Clustering Schemes** *FOUNDATIONS OF COMPUTATIONAL MATHEMATICS*
Carlsson, G., Memoli, F.
2013; 13 (2): 221-252
- **Extracting insights from the shape of complex data using topology** *SCIENTIFIC REPORTS*
Lum, P. Y., Singh, G., Lehman, A., Ishkanov, T., Vejdemo-Johansson, M., Alagappan, M., Carlsson, J., Carlsson, G.
2013; 3
- **Building Markov state models with solvent dynamics** *11th Asia Pacific Bioinformatics Conference (APBC)*
Gu, C., Chang, H., Maibaum, L., Pande, V. S., Carlsson, G. E., Guibas, L. J.
BIOMED CENTRAL LTD.2013
- **Persistent topology and metastable state in conformational dynamics.** *PloS one*
Chang, H., Bacallado, S., Pande, V. S., Carlsson, G. E.
2013; 8 (4)
- **Alternative Axiomatic Constructions for Hierarchical Clustering of Asymmetric Networks** *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*
Carlsson, G., Memoli, F., Ribeiro, A., Segarra, S.
IEEE.2013: 791–794
- **Hierarchical Clustering Methods and Algorithms for Asymmetric Networks** *47th Asilomar Conference on Signals, Systems and Computers*
Carlsson, G., Memoli, F., Ribeiro, A., Segarra, S.
IEEE.2013: 1773–1777
- **AXIOMATIC CONSTRUCTION OF HIERARCHICAL CLUSTERING IN ASYMMETRIC NETWORKS** *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*

-
- Carlsson, G., Memoli, F., Ribeiro, A., Segarra, S.
IEEE.2013: 5219–5223
- **A Topological Paradigm for Hippocampal Spatial Map Formation Using Persistent Homology** *PLOS COMPUTATIONAL BIOLOGY*
Dabaghian, Y., Memoli, F., Frank, L., Carlsson, G.
2012; 8 (8)
 - **Computational topology for configuration spaces of hard disks** *PHYSICAL REVIEW E*
Carlsson, G., Gorham, J., Kahle, M., Mason, J.
2012; 85 (1)
 - **Topology based data analysis identifies a subgroup of breast cancers with a unique mutational profile and excellent survival** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Nicolau, M., Levine, A. J., Carlsson, G.
2011; 108 (17): 7265-7270
 - **Higher topological cyclic homology and the Segal conjecture for tori** *ADVANCES IN MATHEMATICS*
Carlsson, G., Douglas, C. L., Dundas, B. I.
2011; 226 (2): 1823-1874
 - **Derived representation theory and the algebraic K-theory of fields** *JOURNAL OF TOPOLOGY*
Carlsson, G. E.
2011; 4 (3): 543-572
 - **CONTROLLED ALGEBRAIC G-THEORY, I** *JOURNAL OF HOMOTOPY AND RELATED STRUCTURES*
Carlsson, G., Goldfarb, B.
2011; 6 (1): 119-159
 - **Covering homology** *ADVANCES IN MATHEMATICS*
Brun, M., Carlsson, G., Dundas, B. I.
2010; 225 (6): 3166-3213
 - **Zigzag Persistence** *FOUNDATIONS OF COMPUTATIONAL MATHEMATICS*
Carlsson, G., De Silva, V.
2010; 10 (4): 367-405
 - **Characterization, Stability and Convergence of Hierarchical Clustering Methods** *JOURNAL OF MACHINE LEARNING RESEARCH*
Carlsson, G., Memoli, F.
2010; 11: 1425-1470
 - **Statistical Topology via Morse Theory Persistence and Nonparametric Estimation** *AMS Special Session on Algebraic Methods in Statistics and Probability*
Bubenik, P., Carlsson, G., Kim, P. T., Luo, Z.
AMER MATHEMATICAL SOC.2010: 75–92
 - **Multiparameter Hierarchical Clustering Methods**
Carlsson, G., Memoli, F.
edited by Locarek-Junge, H., Weihs, C.
SPRINGER-VERLAG BERLIN.2010: 63–70
 - **COMPUTING MULTIDIMENSIONAL PERSISTENCE** *JOURNAL OF COMPUTATIONAL GEOMETRY*
Carlsson, G., Singh, G., Zomorodian, A.
2010; 1 (1): 72–100
 - **Constructing multi-resolution Markov State Models (MSMs) to elucidate RNA hairpin folding mechanisms.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*
Huang, X., Yao, Y., Bowman, G. R., Sun, J., Guibas, L. J., Carlsson, G., Pande, V. S.
2010: 228-239
 - **The Theory of Multidimensional Persistence** *23rd Annual Symposium on Computational Geometry*
Carlsson, G., Zomorodian, A.

SPRINGER.2009: 71–93

- **Topological methods for exploring low-density states in biomolecular folding pathways** *JOURNAL OF CHEMICAL PHYSICS*
Yao, Y., Sun, J., Huang, X., Bowman, G. R., Singh, G., Lesnick, M., Guibas, L. J., Pande, V. S., Carlsson, G.
2009; 130 (14)
- **On the Nonlinear Statistics of Range Image Patches** *SIAM JOURNAL ON IMAGING SCIENCES*
Adams, H., Carlsson, G.
2009; 2 (1): 110-117
- **TOPOLOGY AND DATA** *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY*
Carlsson, G.
2009; 46 (2): 255–308
- **Computing Multidimensional Persistence** *20th International Symposium on Algorithms and Computations (ISAAC 2009)*
Carlsson, G., Singh, G., Zomorodian, A.
SPRINGER-VERLAG BERLIN.2009: 730–739
- **Zigzag Persistent Homology and Real-valued Functions** *25th Annual Symposium on Computational Geometry*
Carlsson, G., De Silva, V., Morozov, D.
ASSOC COMPUTING MACHINERY.2009: 247–256
- **Localized homology** *COMPUTATIONAL GEOMETRY-THEORY AND APPLICATIONS*
Zomorodian, A., Carlsson, G.
2008; 41 (3): 126-148
- **Structural insight into RNA hairpin folding intermediates** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
Bowman, G. R., Huang, X., Yao, Y., Sun, J., Carlsson, G., Guibas, L. J., Pande, V. S.
2008; 130 (30): 9676-?
- **Derived completions in stable homotopy theory** *JOURNAL OF PURE AND APPLIED ALGEBRA*
Carlsson, G.
2008; 212 (3): 550-577
- **A Near Optimal Coder For Image Geometry With Adaptive Partitioning** *15th IEEE International Conference on Image Processing (ICIP 2008)*
Maleki, A., Shahram, M., Carlsson, G.
IEEE.2008: 1065–1068
- **Topological analysis of population activity in visual cortex** *JOURNAL OF VISION*
Singh, G., Memoli, F., Ishkhanov, T., Sapiro, G., Carlsson, G., Ringach, D. L.
2008; 8 (8)
- **On the local behavior of spaces of natural images** *INTERNATIONAL JOURNAL OF COMPUTER VISION*
Carlsson, G., Ishkhanov, T., De Silva, V., Zomorodian, A.
2008; 76 (1): 1-12
- **A Near Optimal Coder For Image Geometry With Adaptive Partitioning** *15th IEEE International Conference on Image Processing (ICIP 2008)*
Maleki, A., Shahram, M., Carlsson, G.
IEEE.2008: 1061–1064
- **epsilon-entropy of piecewise polynomial functions and tree partitioning compression** *33rd IEEE International Conference on Acoustics, Speech and Signal Processing*
Maleki, A., Carlsson, G.
IEEE.2008: 1181–1184
- **Localized homology** *9th International Conference on Shape Modeling and Applications*
Zomorodian, A., Carlsson, G.
IEEE COMPUTER SOC.2007: 189-?
- **An algebraic topological method for feature identification** *INTERNATIONAL JOURNAL OF COMPUTATIONAL GEOMETRY & APPLICATIONS*
Carlsson, E., Carlsson, G., De Silva, V.

2006; 16 (4): 291-314

- **Computing persistent homology** *DISCRETE & COMPUTATIONAL GEOMETRY*
Zomorodian, A., Carlsson, G.
2005; 33 (2): 249-274
- **A barcode shape descriptor for curve point cloud data** *COMPUTERS & GRAPHICS-UK*
Collins, A., Zomorodian, A., Carlsson, G., Guibas, L. J.
2004; 28 (6): 881-894
- **The integral K-theoretic Novikov conjecture for groups with finite asymptotic dimension** *INVENTIONES MATHEMATICAE*
Carlsson, G., Goldfarb, B.
2004; 157 (2): 405-418
- **A geometric framework for sparse matrix problems** *ADVANCES IN APPLIED MATHEMATICS*
Carlsson, G., de Silva, V.
2004; 33 (1): 1-25
- **On homological coherence of discrete groups** *JOURNAL OF ALGEBRA*
Carlsson, G., Goldfarb, B.
2004; 276 (2): 502-514
- **LORA: Robust and simple routing algorithms for ad hoc mobile wireless networks** *IEEE Global Telecommunications Conference (GLOBECOM 01)*
Chiang, M., Carlsson, G.
IEEE.2001: 2793–2797
- **Admission control, power control and QoS analyses for ad hoc wireless networks** *IEEE International Conference on Communications*
Chiang, M., Carlsson, G.
IEEE.2001: 245–249
- **Cech homology and the novikov conjectures for K- and L-theory** *MATHEMATICA SCANDINAVICA*
Carlsson, G., Pedersen, E. K.
1998; 82 (1): 5-47
- **Continuously controlled algebraic K-theory of spaces and the Novikov conjecture** *MATHEMATISCHE ANNALEN*
Carlsson, G., Pedersen, E. K., Vogell, W.
1998; 310 (1): 169-180
- **On the algebraic K-theory of simply connected spaces** *DUKE MATHEMATICAL JOURNAL*
Bokstedt, M., Carlsson, G., Cohen, R., Goodwillie, T., HSIANG, W. C., Madsen, I.
1996; 84 (3): 541-563
- **On the algebraic K-theory of simply connected spaces** *Duke Mathematical Journal*
Bökstedt, M., Carlsson, G., Cohen, R., Goodwillie, T., Hsiang, W., Madsen, I.
1996; 84 (3)
- **CONTROLLED ALGEBRA AND THE NOVIKOV CONJECTURES FOR K-THEORY AND L-THEORY** *TOPOLOGY*
Carlsson, G., Pedersen, E. K.
1995; 34 (3): 731-758
- **Bounded K-theory and the assembly map in algebraic K-theory** *Novikov conjectures, index theory, and rigidity*
Carlsson, G.
Cambridge University Press.1995: 5–127
- **On the K-theory of infinite product categories** *K-theory*
Carlsson, G.
1995; 9 (4): 305-322
- **Proper homotopy and transfers for infinite groups** *Algebraic Topology and its Applications*
Carlsson, G.

Springer Verlag, 1994: 1–14

- **A SURVEY OF EQUIVARIANT STABLE-HOMOTOPY THEORY** *TOPOLOGY*
Carlsson, G.
1992; 31 (1): 1-27
- **On the homotopy fixed point problem for free loop spaces and other function complexes** *K-theory*
Carlsson, G.
1991; 4 (4): 339-361
- **Equivariant stable theory and the finite descent problem for unstable K-theories** *American Journal of Mathematics*
Carlsson, G.
1991; 113 (6): 963-973
- **Equivariant stable homotopy and Sullivan's conjecture** *Inventiones Mathematicae*
Carlsson, G. E.
1991; 103: 497-525
- **THE CYCLIC GROUPS AND THE FREE LOOP SPACE** *COMMENTARII MATHEMATICI HELVETICI*
Carlsson, G. E., Cohen, R. L.
1987; 62 (3): 423-449
- **Segal's Burnside ring conjecture and the homotopy limit problem.** *Homotopy Theory (Durham 1985)*
Carlsson, G.
Cambridge University Press, 1987: 6–34
- **Equivariant stable homotopy and Segal's Burnside conjecture** *Annals of Mathematics*
Carlsson, G. E.
1984; 120 (2): 189-224
- **G.B. Segal's Burnside ring conjecture for $(\mathbb{Z}/2)^k$** *Topology*
Carlsson, G.
1983; 22 (1): 83-103
- **On the homology of finite free $(\mathbb{Z}/2)^n$ -complexes** *Inventiones Mathematicae*
Carlsson, G.
1983; 74 (1): 139-147
- **On the rank of abelian groups acting freely on $(S^n)^k$** *Inventiones Mathematicae*
Carlsson, G.
1982; 69 (3): 393-400
- **A counterexample to a conjecture of Steenrod** *Inventiones Mathematicae*
Carlsson, G.
1981; 64 (1): 171-174
- **Some restrictions on groups acting freely on $(S^n)^k$** *Transactions of the American Mathematical Society*
Carlsson, G.
1981; 264 (2): 449-457
- **SOME EXACT SEQUENCES IN THE THEORY OF HERMITIAN FORMS** *JOURNAL OF PURE AND APPLIED ALGEBRA*
Carlsson, G., Milgram, R. J.
1980; 18 (3): 233-252
- **Wu invariants of Hermitian forms** *Journal of Algebra*
Carlsson, G.
1980; 65 (1): 188-205
- **On the Witt group of a 2-adic group ring** *Quarterly Journal of Mathematics*
Carlsson, G.

1980; 31 (3): 283-313

- **On the stable splitting of $bo^{\wedge}bo$ and torsion operations in connective K-theory** *Pacific Journal of Mathematics*
Carlsson , G.
1980; 87 (2): 283-297
- **On the non-existence of free actions of elementary abelian groups on products of spheres** *American Journal of Mathematics*
Carlsson , G.
1980; 102 (6): 1147-1157
- **An Adams type spectral sequence for change of rings** *Houston Journal of Mathematics*
Carlsson , G.
1978; 4: 541-550