

List of publications of Klaus Hepp

Autor(en): **[s.n.]**

Objektyp: **BookReview**

Zeitschrift: **Helvetica Physica Acta**

Band (Jahr): **70 (1997)**

Heft 1-2

PDF erstellt am: **06.08.2024**

Nutzungsbedingungen

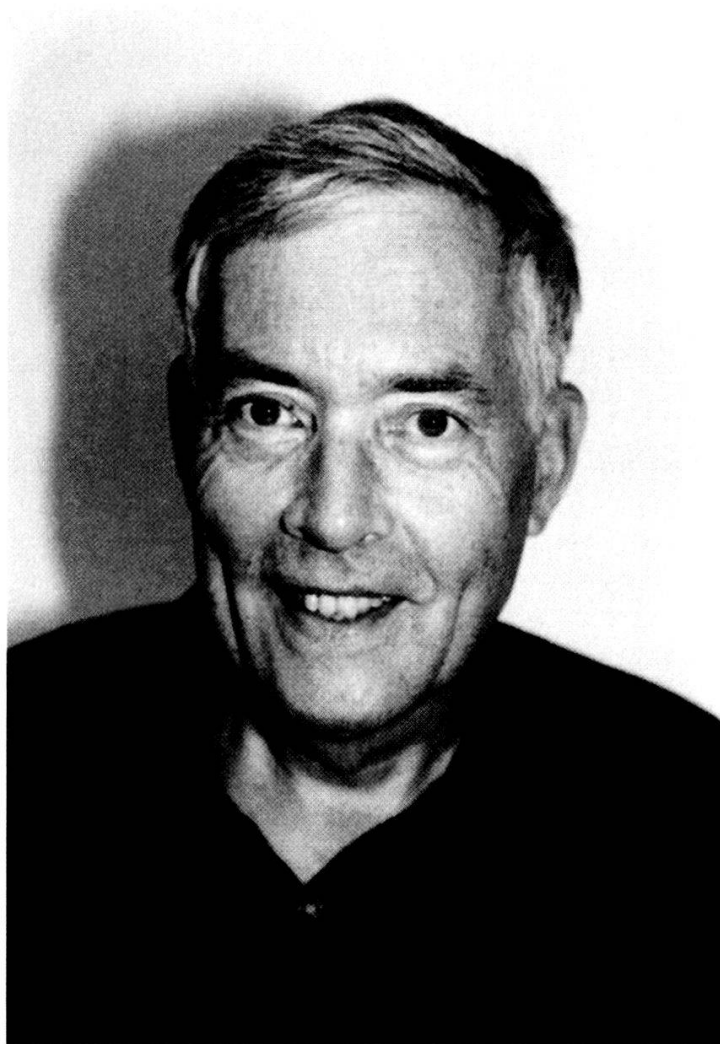
Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.



List of Publications of Klaus Hepp

Original papers:

K. Hepp, R. Jost, D. Ruelle, O. Steinmann, *Necessary restriction on Wightman functions,*

Helv Phys Acta 34, 542 (1961)

R. Jost, K. Hepp, *Über die Matrizenelemente des Translationsoperators,*

Helv Phys Acta 35, 34-46 (1962)

H. Araki, K. Hepp, D. Ruelle, *On the asymptotic behaviour of Wightman functions in space-like directions,*

Helv Phys Acta 35, 164-174 (1962)

K. Hepp, *On the asymptotic condition in a local relativistic quantum field theory*,
Acta Phys Austriaca 17, 85-95 (1963)

K. Hepp, *Klassische komplexe Liesche Gruppen und kovariante analytische Funktionen*,
Math Annalen 152, 149-158 (1963)

K. Hepp, *Lorentz-kovariante analytische Funktionen*,
Helv Phys Acta 36, 355-375 (1963)

K. Hepp, *Lorentz invariant analytic S-matrix amplitudes*,
Helv Phys Acta 37, 55-73 (1964)

K. Hepp, *On the analyticity properties of the scattering amplitude in relativistic quantum field theory*,
Helv Phys Acta 37, 639-658 (1964)

K. Hepp, *Spatial cluster decomposition properties of the S-matrix*,
Helv Phys Acta 37, 659-662 (1964)

K. Hepp, *On the connection between the LSZ and Wightman quantum field theory*,
Comm Math Phys 1, 95-111 (1965)

K. Hepp, *One-particle singularities of the S-matrix in quantum field theory*,
J Math Phys 6, 1762-1767 (1965)

K. Hepp, *Proof of the Bogoliubov-Parasiuk theorem on renormalization*,
Commun Math Phys 2, 301-326 (1965)

K. Hepp, *On the equivalence of additive and analytic renormalization*,
Commun Math Phys 14, 67-69 (1969)

K. Hepp, *On the quantum mechanical N-body problem*,
Helv Phys Acta 42, 425-458 (1969)

K. Hepp, *Rigorous results on the s-d model of the Kondo effect*,
Solid State Comm 8, 2087-2090 (1970)

K. Hepp, *Scattering theory in the Heisenberg ferromagnet*,
Phys Rev B5, 95-97 (1972)

K. Hepp, *Quantum theory of measurement and macroscopic observables*,
Helv Phys Acta 45, 237-248 (1972)

K. Hepp, E.H. Lieb, *On the superradiant phase transition for molecules in a quantized radiation field: the Dicke maser model*,
Annals of Physics 76, 360-404 (1973)

K. Hepp, *On phase transitions in open systems far from thermal equilibrium*,
Acta Phys Austriaca Suppl XI, 475-492 (1973)

- K. Hepp, E.H. Lieb, *Equilibrium statistical mechanics of matter interacting with the quantized radiation field*,
Phys Rev A8, 2517-2525 (1973)
- K. Hepp, E.H. Lieb, *Phase transitions in reservoir-driven open systems with applications to lasers and superconductors*,
Helv Phys Acta 46, 573-603 (1973)
- K. Hepp, *The classical limit for quantum mechanical correlation functions*,
Commun Math Phys 35, 265-277 (1974)
- K. Hepp, *Two models for Josephson oscillators*,
Ann Phys 90, 285-294 (1975)
- K. Hepp, *The Onsager relations for quantum systems weakly coupled to KMS reservoirs*,
Z Phys B20, 53-54 (1975)
- W. Braun, K. Hepp, *The Vlasov dynamics and its fluctuations in the $1/N$ limit of interacting classical particles*,
Commun Math Phys 56, 101-113 (1977)
- K. Hepp, *On phase transitions in open systems far from thermal equilibrium*,
Proc Steklov Institute of Mathematics no 2, 337-345 (1978)
- K. Hepp, V. Henn, *Neuronal activity preceding rapid eye movements in the brain stem of the alert monkey*,
Prog Brain Res 50, 645-652 (1979)
- K. Hepp, V. Henn, J. Jaeger, *Eye movement related neurons in the cerebellar nuclei of the alert monkey*,
Exp Brain Res 45, 253-264 (1982)
- V. Henn, J.-A. Büttner-Ennever, K. Hepp, *The primate oculomotor system. I. Motoneurons*,
Human Neurobiol 1, 77-85 (1982)
- V. Henn, K. Hepp, J.-A. Büttner-Ennever, *The primate oculomotor system. II. Premotor system*,
Human Neurobiol 1, 87-95 (1982)
- K. Hepp, V. Henn, *Spatio-temporal recoding of rapid eye movement signals in the monkey paramedian pontine reticular formation (PPRF)*,
Exp Brain Res 52, 105-120 (1983)
- V. Henn, W. Lang, K. Hepp, H. Reisine, *Experimental gaze palsies in monkeys and their relation to human pathology*,
Brain 107, 619-636 (1984)

- V. Henn, R.W. Baloh, K. Hepp, *The sleep-wake transition in the oculomotor system*, *Exp Brain Res* 54, 166-176 (1984)
- H. Schnyder, H. Reisine, K. Hepp, V. Henn, *Frontal eye field projection to the paramedian pontine reticular formation traced with wheat germ agglutinin in the monkey*, *Brain Res* 329, 151-160 (1985)
- K. Hepp, V. Henn, *Iso-frequency curves of oculomotor neurons in the rhesus monkey*, *Vision Res* 25, 493-499 (1985)
- K. Hepp, V. Henn, *Extraocular motoneuron behavior in synergistic action*, *Prog Brain Res* 64, 31-38 (1986)
- K. Hepp, *Die Erforschung neuronaler Netzwerke*, *Technische Rundschau* 80, 68-73 (1988)
- K. Hepp, T. Vilis, V. Henn, *On the generation of rapid eye movements in three dimensions*, *Ann NY Acad Sci* 545, 140-153 (1988)
- T. Vilis, K. Hepp, U. Schwarz, V. Henn, *On the generation of vertical and torsional rapid eye movements in the monkey*, *Exp Brain Res* 77, 1-11 (1989)
- V. Henn, K. Hepp, T. Vilis, *Rapid eye movement generation in the primate. Physiology, pathophysiology, and clinical implications*, *Rev Neurol (Paris)* 145, 540-545 (1989)
- K. Hepp, *On Listing's law*, *Commun Math Phys* 132, 285-292 (1990)
- D. Straumann, T. Haslwanter, M.-C. Hepp-Reymond, K. Hepp, *Listing's law for eye, head and arm movements and their synergistic control*, *Exp Brain Res* 86, 209-215 (1991)
- A.J. Van Opstal, K. Hepp, B.J.M. Hess, D. Straumann, V. Henn, *Two- rather than three-dimensional representation of saccades in monkey superior colliculus*, *Science* 252, 1313-1315 (1991)
- T. Haslwanter, D. Straumann, K. Hepp, B.J.M. Hess, V. Henn, *Smooth pursuit eye movements obey Listing's law in the monkey*, *Exp Brain Res* 87, 470-472 (1991)
- K. Hepp, A.J. Van Opstal, D. Straumann, B.J.M. Hess, V. Henn, *Monkey superior colliculus represents rapid eye movements in a two-dimensional motor map*, *J Neurophysiol* 69, 565-579 (1993)
- K. Hepp, *Oculomotor control: Listing's law and all that*, *Current Opinions in Neurobiology* 4, 862-868 (1994)

- K. Hepp, *Theoretical explanations of Listing's law and their implication for binocular vision*,
Vision Res 35, 3237-3241 (1995)
- A.J. Van Opstal, K. Hepp, Y. Suzuki, V. Henn, *Influence of eye position on activity in monkey superior colliculus*,
J Neurophysiol 74, 1593-1610 (1995)
- A.J. Van Opstal, K. Hepp, *A novel interpretation for the collicular role in saccade generation*,
Biol Cybern 73, 431-445 (1995)
- Y. Suzuki, J.A. Büttner-Ennever, D. Straumann, K. Hepp, B.J.M. Hess, *Deficits in torsional and vertical rapid eye movements and shift of Listing's plane after uni- and bilateral lesions of the rostral interstitial nucleus of the medial longitudinal fasciculus*,
Exp Brain Res 106, 215-232 (1995)
- M.A. Frens, K. Hepp, Y. Suzuki, V. Henn, *Rotational kinematics and eye position dependence during vestibular-optokinetic stimulation in the monkey*,
Ann NY Acad Sci 781, 622-624 (1996)
- K. Hepp, Y. Suzuki, D. Straumann, B.J.M. Hess, V. Henn, *Eye position dependence of innervation on-directions of motoneurons in the monkey*,
Ann NY Acad Sci 781, 629-632 (1996)
- A.J. Van Opstal, K. Hepp, Y. Suzuki, V. Henn, *Role of monkey nucleus reticularis tegmenti pontis in the stabilization of Listing's plane*,
J Neuroscience 16, 7284-7296 (1996)
- M.A. Frens, Y. Suzuki, K. Hepp, V. Henn, *The collicular code of saccade direction depends on the roll orientation of the head relative to gravity*,
Exp Brain Res, submitted (1996)
- Y. Suzuki, K. Hepp, D. Straumann, J.I. Simpson, D. Rudinger, V. Henn, *Three-dimensional coding properties of extraocular motoneurons in the rhesus monkey. I. Innervation- and anatomical on-directions*,
J Neurophysiol, submitted (1996)
- K. Hepp, Y. Suzuki, D. Straumann, B.J.M. Hess, V. Henn, *Three-dimensional coding properties of extraocular motoneurons in the rhesus monkey. II. Nonlinear dependence of firing rate on eye position*,
J Neurophysiol, submitted (1996)
- K. Hepp, Y. Suzuki, A.J. Van Opstal, D. Straumann, V. Henn, *On the three-dimensional rapid eye movement generator in the monkey*,
Exp Brain Res, submitted (1996)
- K. Hepp, *Space and brain*,
Rev Mod Phys, to appear (1997)

Book chapters:

- K. Hepp, *On the connection between Wightman and LSZ quantum field theory.*
In: M. Chretien, S. Deser (eds.) 'Axiomatic Field Theory', Gordon and Breach, New York, pp 135-246, 1966 (Russian translation: Atomisdat, Moscow, 1971)
- K. Hepp, *Progress towards models in quantum field theory,*
In: N. Svartholm (ed.) 'Elementary Particle Theory: Relativistic Groups and Analyticity', Wiley, New York, pp 269-283, 1968
- K. Hepp, *Théorie de la renormalisation,*
Lecture Notes in Physics Vol 2, Springer, Berlin, 1969 (Russian translation: Nauka, Moscow, 1974)
- K. Hepp, *Renormalized Hamiltonians for a class of quantum fields with infinite mass and charge renormalizations.*
In: 'Problems of Theoretical Physics' (essays dedicated to N.N. Bogolubov on the occasion of his 60th birthday), Nauka, Moscow, pp 181-194, 1969
- K. Hepp, *Renormalized Hamiltonian dynamics and representations of the canonical (anti-) commutation relations,*
In: 'Les systèmes à un nombre infini de degrés de liberté', Colloques Internationaux du CNRS no 181, Editions du CNRS, Paris, pp 49-62, 1970
- K. Hepp, *Renormalization Theory,*
In: C. de Witt, R. Stora 'Statistical Mechanics and Quantum Field Theory', Gordon and Breach, New York, pp 429-500, 1971
- K. Hepp, E.H. Lieb, *Constructive macroscopic quantum electrodynamics,*
In: G. Velo, A. Wightman (eds.) 'Constructive Quantum Field Theory', Lecture Notes in Physics Vol 25, Springer, Berlin, pp 298-316, 1973
- K. Hepp, *Progress in quantum field theory.*
In: A. Zichichi (ed.) 'Highlights in Particle Physics', Editrice Compositori, Bologna, pp 22-51, 1973
- K. Hepp, E.H. Lieb, *The laser: a reversible quantum dynamical system with irreversible classical macroscopic motion.*
In: J. Moser (ed.) 'Dynamical Systems, Theory and Applications', Lecture Notes in Physics Vol 38, Springer, Berlin, 1975
- K. Hepp, *Results and problems in irreversible statistical mechanics of open systems.*
In: H. Araki (ed.) 'International Symposium on Mathematical Problems in Theoretical Physics', Lecture Notes in Physics Vol 39, Springer, Berlin, pp 138-150, 1975
- K. Hepp, V. Henn, J. Jaeger, W. Waespe, *Oculomotor pathways through the cerebellum,*
In: A.F. Fuchs, W. Becker (eds.) 'Progress in Oculomotor Research', Elsevier, New York, pp 97-105, 1981

V. Henn, K. Hepp, *Two-dimensional analysis of eye movements in oculomotor and premotor structures.*

In: A.F. Fuchs, W. Becker (eds.) 'Progress in Oculomotor Research', Elsevier, New York, pp 81-88, 1981

K. Hepp, *Physics and medicine* (C. Powell Memorial Lecture).

In: I.A. Dorobantu (ed.) 'Trends in Physics 1981', European Physical Society, Bucharest, pp 45-69, 1981

W. Lang, V. Henn, K. Hepp, *Gaze palsies after selective pontine lesions in monkeys.*

In: A. Roucoux, M. Crommelinck (eds.) 'Physiological and Pathological Aspects of Eye Movements', Dr. W. Junk Publ, The Hague, pp 209-218, 1982

K. Hepp, V. Henn, *Physiology of horizontal gaze.*

In: G. Lennerstrand, D.S. Zee, E.L. Keller (eds.) 'Functional Basis of Oculomotor Disorders', Pergamon, Oxford, pp 247-255, 1982

K. Hepp, V. Henn, *Neurodynamics of the oculomotor system: space-time recoding and a non-equilibrium phase transition.*

In: E. Basar, H. Flohr, H. Haken, A.J. Mandell (eds.) 'Synergetics of the Brain', Springer, Berlin, 1983

K. Hepp, *Parallel processes in oculomotor control.*

In: H. Haken (ed.) 'Complex Systems - Operational Approaches', Springer, Berlin, pp 169-178, 1985

K. Hepp, *Levels of structure and function in neurobiology.*

In: S. Albeverio, G. Casati, D. Merlini (eds.) 'Stochastic Processes in Classical and Quantum Systems', Lecture Notes in Physics Vol 262, Springer, Berlin, pp 533-554, 1986

K. Hepp, V. Henn, *Nonabelian neurodynamics.*

In: D. Baeriswyl, M. Droz, A. Malaspinas, P. Martinoli (eds.) 'Physics in Living Matter', Lecture Notes in Physics Vol 284, pp 163-177, 1987

K. Hepp, V. Henn, T. Vilis, B. Cohen, *Brainstem regions related to saccade generation.*

In: R.H. Wurtz, M.E. Goldberg (eds.) 'The Neurobiology of Saccadic Eye Movements', Elsevier, Amsterdam, pp 105-212, 1989

V. Henn, K. Hepp, *Die neuronale Steuerung von Augenbewegungen in drei Dimensionen.*

In: H. Mühlendyck, W. Rüssmann (eds.) 'Augenbewegung und visuelle Wahrnehmung', Enke, Stuttgart, pp 38-43, 1990

K. Hepp, V. Henn, B.J.M. Hess, A.J. Van Opstal, D. Straumann, *Is Listing's law implemented in the spatial or temporal saccade generator?*

In: H. Shimazu, K. Shinoda (eds.) 'Vestibular and Brain Stem Control of Eye, Head and Body Movement', Japan Scientific Societies Press, Tokyo, 1991

V. Henn, D. Straumann, B.J.M. Hess, A.J. Van Opstal, K. Hepp, *The generation of torsional and vertical rapid eye movements in the rostral interstitial nucleus of the MLF (riMLF)*,

In: H. Shimazu, K. Shinoda (eds.) 'Vestibular and Brain Stem Control of Eye, Head and Body Movement', Japan Scientific Societies Press, Tokyo, 1991

K. Hepp, T. Haslwanter, D. Straumann, M.-C. Hepp-Reymond, V. Henn, *The control of arm-, gaze- and head movements by Listing's law.*

In: R. Caminiti, P.B. Johnson, Y. Burnod (eds.) 'Control of Arm Movements in Space', Springer, Berlin, pp 307-319, 1992

K. Hepp, *Distributive Intelligenz von Gehirnzellen.*

In: C. Thomas (ed.) 'Auf der Suche nach dem ganzheitlichen Augenblick. Der Aspekt Ganzheit in den Wissenschaften', vdf Hochschulverlag, Zürich, pp 163-166, 1992

J.-P. Changeux, A. Connes, 'Gedankenmaterie' (K. Hepp: German translation and glossary),
Springer, Berlin, 1992

A.J. Van Opstal, K. Hepp, B.J.M. Hess, D. Straumann, V. Henn, *Experimental test of two models for the role of monkey superior colliculus in 3D saccade generation.*

In: A. Berthoz (ed.) 'Multisensory Control of Movement', Oxford University Press, Oxford, pp 240-254, 1993

Y. Suzuki, K. Hepp, D. Straumann, V. Henn, *Three-dimensional representation of position coding in extra-ocular motoneurons in the rhesus monkey.*

In: A.F. Fuchs, T. Brandt, U. Büttner, D. Zee (eds.) 'Contemporary Ocular Motor and Vestibular Research: A Tribute to David A. Robinson', Thieme, Stuttgart, pp 528-536, 1994

K. Hepp, *Ein neues Forschungsgebiet: Neuroinformatik.*

In: J.W. Schreggenberger (ed.) 'Die Zukunft beginnt im Kopf', vdf Hochschulverlag, Zürich, pp 59-63, 1994

K. Hepp, Y. Suzuki, D. Straumann, B.J.M. Hess, *On the 3-dimensional rapid eye movement generator in the monkey.*

In: J.M. Delgado-Garcia, E. Godeaux, P.-P. Vidal (eds.) 'Information Processing Underlying Gaze Control', Pergamon, London, pp 65-74, 1994

K. Hepp, *Saccades and Listing's law.*

In: M.A. Arbib (ed.) 'The Handbook of Brain Theory and Neural Networks', MIT Press, Cambridge, 1995

K. Hepp, *Projekt für eine sehende Hand,*

In: 'Tasten', Kunst- und Ausstellungshalle der Bundesrepublik Deutschland, pp 276-285, Bonn, 1996

A.J. Van Opstal, K. Hepp, Y. Suzuki, V. Henn, *Three-, rather than two-dimensional burst generation for spontaneous saccadic eye movements.*

In: M. Fetter, D. Tweed, H. Misslisch (eds.) 'Three-Dimensional Kinematics of Eye-, Head-, and Limb Movements', Harwood, Amsterdam, 1997

K. Hepp, A.J. Van Opstal, Y. Suzuki, D. Straumann, B.J.M. Hess, V. Henn, *Listing's law: visual, motor or visuomotor?*

In: M. Fetter, D. Tweed, H. Misslisch (eds.) 'Three-Dimensional Kinematics of Eye-, Head-, and Limb Movements', Harwood, Amsterdam, 1997

Y. Suzuki, D. Straumann, K. Hepp, V. Henn, *Three-dimensional eye movements evoked by electrical microstimulation of the trochlear nerve in alert rhesus monkeys,*

In: M. Fetter, D. Tweed, H. Misslisch (eds.) 'Three-Dimensional Kinematics of Eye-, Head-, and Limb Movements', Harwood, Amsterdam, 1997