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## Employment

### Professor Emeritus

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Department of Electronics and Nanoengineering  
Aalto University  
1 May 2024 → present

## Research outputs

### Electromagnetic Boundary Conditions Defined by Reflection Properties of Eigen Plane Waves.

Lindell, I. V. & Sihvola, A., 2021, In: Progress in Electromagnetics Research B. 94, p. 37-52 16 p.

### Generalization of Perfect Electromagnetic Conductor Boundary

Lindell, I. V. & Sihvola, A., Nov 2020, In: IEEE Transactions on Antennas and Propagation. 68, 11, p. 7406-7413 8 p., 9104017.

### Rumsey's reaction concept generalized

Lindell, I. V. & Sihvola, A., 1 Jan 2020, In: Progress in Electromagnetics Research Letters. 89, p. 1-6 6 p.

### Self-dual boundary conditions in electromagnetics

Lindell, I. V. & Sihvola, A., 1 Jan 2020, In: Progress In Electromagnetics Research PIER. 167, p. 41-54 14 p.

### Boundary conditions in electromagnetics

Lindell, I. & Sihvola, A., Oct 2019, Hoboken, NJ, USA: Wiley. 272 p. (IEEE Press Series on Electromagnetic Wave Theory)

### On linear and sesquilinear boundary conditions in electromagnetics

Lindell, I. V. & Sihvola, A., 1 Sept 2019, *Proceedings of the 2019 21st International Conference on Electromagnetics in Advanced Applications, ICEAA 2019*. IEEE, 8879372

### On General Boundary Conditions

Lindell, I. V. & Sihvola, A., 24 Sept 2018.

### General boundary conditions in electromagnetics

Lindell, I. & Sihvola, A., 2018, *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*. United States: IEEE, p. 2247-2248 (Digest of the IEEE Antennas and Propagation Society International Symposium).

### Electromagnetic Wave Reflection from Boundaries defined by General Linear and Local Conditions

Lindell, I. V. & Sihvola, A., Sept 2017, In: IEEE Transactions on Antennas and Propagation. 65, 9, p. 4656-4663 8 p.

### Generalized Soft-and-Hard/DB boundary

Lindell, I. & Sihvola, A., 2017, In: IEEE Transactions on Antennas and Propagation. 65, 1, p. 226-233

### On the most general linear and local boundary conditions

Lindell, I., 2017, *2017 XXXIInd General Assembly and Scientific Symposium of the International Union of Radio Science (URSI GASS)*. IEEE, 4 p.

### **Classifications of electromagnetic media**

Lindell, I. V., 2015, *2015 1st URSI Atlantic Radio Science Conference (URSI AT-RASC)*. IEEE, 7302919

### **On the classification of electromagnetic media (invited)**

Lindell, I. V., 2010, *2010 URSI International Symposium on Electromagnetic Theory*. Berlin, Germany: IEEE, p. 767-770

### **DB boundary as isotropic soft surface**

Lindell, I. V. & Sihvola, A. H., 2008, *Asia-Pacific Microwave Conference, Hong Kong, China, December 16-20, 2008*. Hong Kong, China, p. 4

### **Duality transformation and Green dyadics for bi-anisotropic media**

Lindell, I. & Ruotanen, L., 1998, *Bianisotropics'98, 7th International Conference on Complex Media, Braunschweig, Germany, 3-6 June 1998*. Braunschweig, Germany, p. 5-8

### **Conditions for the parameter dyadics of lossless bi-anisotropic media**

Lindell, I., Sihvola, A., Puska, P. & Ruotanen, L., 1994, Espoo, p. 8, (Sähkömagnetiikan laboratorion julkaisusarja; no. 184).

### **Electromagnetic waves in chiral and bi-isotropic media**

Lindell, I., Sihvola, A., Tretyakov, S. & Viitanen, A. J., 1994, Artech House. 332 p.

### **Plane-wave propagation in a transversely bianisotropic uniaxial medium**

Lindell, I. V., Viitanen, A. J. & Koivisto, P. K., 1993, Espoo: Teknillinen korkeakoulu, (Sähkömagnetiikan laboratorion julkaisusarja; no. 133).

### **Karl F Lindman - the last Hertzian and a harbinger of electromagnetic chirality**

Lindell, I. V., Sihvola, A. H. & Kurkijärvi, J., 1992, In: *Radioscientist*. 3, 2, p. 38-53

### **Karl F Lindman - the last Hertzian and a harbinger of electromagnetic chirality**

Lindell, I. V., Sihvola, A. H. & Kurkijärvi, J., 1992, In: *IEEE Antennas and Propagation Magazine*. 34, 3, p. 24-30

## **Activities**

### **Coordinate-free classifications of electromagnetic media and boundaries**

Lindell, I. (Speaker)

24 Jul 2016 → 25 Jul 2016