

## PUBLICATIONS

- [1] Dirac Operator and Discrete Series, *Annals of Mathematics* vol 96 (1972) **PDF**
- [2] A note on the vanishing of certain  $L^2$ -cohomologies, *Journal of the Math. Soc. Japan* 23 (1971) **PDF**
- [3] A geometric meaning of the multiplicity of integrable discrete classes in  $L^2(G/\Gamma)$ , (with R. Hotta) *Osaka J. Math.* 10 (1973) **PDF**
- [4] Multiplicity formulas for discrete series, (with R. Hotta), *Inv. Math.* 26, (1974) **PDF**
- [5] An algebraic construction of a class of representations of a semisimple Lie Algebra, *Math. Ann.* 226, (1977) **PDF**
- [6] A generalization of the Enright-Varadarajan modules, *Compositio Math.* 36 (1978) **PDF**
- [7] Criteria for the unitarizability of some highest weight modules, *Proc. Ind. Acad. Sci.* 89 (1980) **PDF**
- [8] The transfer of invariant pairings to lattices, (with T. Enright) *Pac. Journal of Math.* 95 (1981) **PDF**
- [9] Holomorphic forms in  $\Gamma \backslash G/K$  and Chern classes, *Topology* 21 (1982) **PDF**
- [10] A proof of a conjecture of Kashiwara and Vergne, (with T. Enright), “*Non-commutative Harmonic Analysis and Lie Groups*”, *Lecture Notes in Mathematics* 880 Springer-Verlag, (1981) **PDF**
- [11] Spin modules for the orthogonal affine Lie algebras (unpublished)
- [12] On a reciprocity between the discrete part of some induced representations (unpublished)
- [13] Unitary derived functor modules with small spectrum (with T. Enright, N. Wallach and J. A. Wolf) *Acta. Math.* 154 (1985) **PDF**

- [14] Unitary modules with non vanishing relative Lie algebra cohomology, *Proceedings of the International Congress of Mathematicians*, Warsaw (1983)
- [15]  $t$ -structures in the derived category of representations of a quiver, *C. R. Acad. Sc. Paris, t. 304, Serie I*, (1987) also *Proc. Indian Acad. Sci.* 98 (1988) **PDF PDF**
- [16] On the quantization of a coherent family of representations at roots of unity, *J. Math. Soc. of Jap.* 48 (1996) **PDF**
- [17] Quantum Analogues of a Coherent Family of Modules at Roots of Unity :  $A_2, B_2$ , pp. 87-115 in: S.D. Adhikari (ed.), *Current Trends in Mathematics and Physics - A Tribute to Harish-Chandra*, Narosa, New Delhi, 1995 **PDF**
- [18] Quantum Analogues of a Coherent Family of Modules at Roots of Unity:  $A_3$ , *Acta Applicandae Mathematicae* 44 (1996) **PDF**
- [19] Colouring Quasi-Crystals with prescribed symmetries and frequencies, (with A. El Kacimi), *Discrete Comput. Geom.* 22 (1999), 459-475. **PDF**
- [20] Trace Splittings in  $C^*$ -algebras of Tiling Systems via Colourings (with A. El Kacimi), *Proceedings of the American Mathematical Society* 131 (2003), 1191-1204. **Proc. AMS, vol.131 PDF PostScript**
- [21] Quantum Analogues of a Coherent Family of Modules at Roots of one:  $G_2$ , in: V.B. Mehta (Ed.), *Algebraic Groups and Homogeneous Spaces*, Narosa Publ. House, 2007, pp.475-480 **PDF**
- [22] Quantum Analogues of discrete series at roots of one, *Proceedings of an International Conference on "Harmonic Analysis and Quantum Groups"*, January 3-8, 2005, Cochin University of Science and Technology, Kochi. **PDF**
- [23] A Product for Harmonic Spinors on reductive homogeneous spaces, (with S. Mehdi), **Journal of Lie Theory Vol.18(2008) PDF**
- [24] Skew-product for group valued edge labellings of Bratteli diagrams, (with A. El Kacimi), *Publ. Mat.* **Vol.53**, (2009), 329-354. **PDF**

- [25] The  $K$ -group of substitutional systems, (with A. El Kacimi) *Publ. Mat.* **Vol.54**, (2010), 3-23. [PDF](#) [PDF](#)
- [26] Representation theoretic harmonic spinors, (with Salah Mehdi), *Preprint, To appear in the Platinum Jubilee Special Issue of Indian Journal of Pure and Applied Mathematics.* [PDF](#)
- [27] Cubic Dirac cohomology for generalized Enright-Varadarajan modules, (with Salah Mehdi), *Preprint* [PDF](#)
- [28] Classification of Discrete Series by Minimal  $K$  type, *Electronic Journal of Representation Theory* [PDF](#)