

## References

- [1] Altay, B. Başar, F. and Mursaleen, M.: On the Euler sequence space which include the spaces  $l_p$  and  $l_\infty$ .I, Inform. Sci., 2006; 176(10): 1450-1462.
- [2] Banach, S.: Theorie des operations lineaires, Warszawa. 1932.
- [3] Başar, F. and Altay, B.: On the space of sequences of p-bounded variation and related matrix mappings, Ukrainion Math.J., 2003; 55(1): 136-147.
- [4] Bhardwaj, V. K. and Singh, N.: Some sequence spaces defined by Orlicz functions, Demonstratio Math., 2000; 33(3): 571-582.
- [5] Buck, R. C.: Generalized Asymptotic Density, Amer. J. Math. 1953; 75: 335-346.
- [6] Buck, R. C., Başar, F. and Altay, B., Generalized Asymptotic Density, Amer. J. Math., 1953; 75: 335-346.
- [7] Connor, J. S.: The statistical and strong P-Cesaro convergence of sequences, Analysis, 1988; 8: 47-63.
- [8] Connor, J. S.: On strong matrix summability with respect to a modulus and statistical convergence, Canad. Math. Bull, 1989; 32: 194-198.
- [9] Connor, J. S., Fridy, J. A. and Kline, J.: Statistically Pre-Cauchy sequence, Analysis, 1994; 14: 311-317.
- [10] Demirci, K.: I-limit superior and limit inferior, Math. Commun. Analysis, 2001; 6: 165-172.
- [11] Esi, A. and Et, M.: Some new sequence spaces defined by a sequence of Orlicz functions, Indian J. Pure Appl. Math. 2000; 31(8): 967-972.

- [12] Fast, H.: Sur la convergence statistique, Colloq. Math, 2001; 6: 165-172.
- [13] Fridy, J. A.: On statistical convergence, Analysis. 1985; 5: 301-313.
- [14] Garling, D. J. H.: On Symmetric Sequence Spaces, Proc.London. Math. Soc. 1966; 16: 85-106.
- [15] Garling, D. J. H.: Symmetric bases of locally convex spaces, Studia Math. Soc. 1968; 30: 163-181.
- [16] Gramsch, B.: Die Klasse metrischer linearer Räume  $L(\phi)$ , Math. Ann. (171), 61-78. (1967)(30), 163-181. (1968). CHECK
- [17] Gurdal, M.: Some Types Of Convergence, Doctoral Dissertation, S. Demirel Univ., Isparta, 2004.
- [18] Gurdal, M., Ahmet, S.: Extremal I-Limit Points of Double sequences, Applied Mathematics E-Notes. 2008; 8: 131-137.
- [19] Gurdal, M., Huban, M. B.: On I-Convergence of Double Sequences in the Topology induced by Random 2-Norms, Matematicki Vesnik. 2014; 66(1): 73-83.
- [20] Kamthan, P. K and Gupta, M.: Sequence spaces and Series, Marcel Dekker Inc, New York. 1980.
- [21] Khan, V. A.: On Riesz Musielak Orlicz sequence spaces, Numerical Functional Analysis and Optimization, 2007; 28(7-8): 883-895.
- [22] Khan, V. A.: On a new sequence spaces defined by Orlicz functions, Commun. Fac. Sci. Univ. Ank. Series A1, 2008; 57(2): 25-33.
- [23] Khan, V. A.: New lacunary strongly summable difference sequences and  $\Delta_v^m$ -lacunary almost statistical convergence, Vietnam J. Math., 2008; 36: 405-413.

- [24] Khan, V. A.: On a new sequence spaces related to Orlicz sequence space, *J. Mathematics and its Applications*, 2008; 30: 61-69.
- [25] Khan, V. A.: On a new sequence spaces defined by Museilak Orlicz functions, *Studia Math.*, 2010; 2: 143-149.
- [26] Khan, V. A.: A new type of difference sequence spaces, *Applied Sciences (Balkan Society of Geometers)*, 2010; 12: 99-105.
- [27] Khan, V. A.: Quasi almost convergence in a normed space for double sequences, *Thai J. Math.*, 2010; 8(1): 227-231.
- [28] Khan, V. A.: Some new generalized difference sequence spaces defined by a sequence of moduli, *Applied Math. -A Journal of Chinese University*, 2011; 26(1): 104-108.
- [29] Khan, V. A., Ebadullah, K., Esi, A., Khan, N. and Shafiq, M.: On Paranorm Zweier I-Convergent Sequence Spaces, *Journal of Mathematics (Hindawi Publishing Corporation)* 2013; Vol.-2013, Article ID 613501, 6 pages (U.A.E).
- [30] Khan, V. A., Ebadullah, K. and Ahmad, A.: I-Pre-Cauchy Sequences and Orlicz functions, *J. Math. Analysis.* 2012; 3(1): 21-26 (KOSOVO).
- [31] Khan, V. A., Ebadullah, K.: On Zweier I-convergent sequence spaces defined by a modulus function. *Afrika Matematika*, 2013; 2.
- [32] Khan, V. A., Ebadullah, K.: On some I-convergent sequence spaces defined by a modulus function, *Theory Appl. Math. Comput. Sci.*, 2012; 1(2): 22-30, (ROMANIA).
- [33] Khan, V. A., Suantai, S. and Ebadullah, K.: On Some I-Convergent Sequence Spaces Defined By a Sequence of Moduli, *Journal of*

Nonlinear Analysis and Optimization, 2012; 3(2): 145-152, (THAILAND).

- [34] Khan, V. A. and Ebadullah, K.: I-Convergent Difference Sequence Spaces Defined By a Sequence of Modulii, J. Math. Comput. Sci., 2012; 2(2): 265-273. ISSN: 1927-5307(U.K.)
- [35] Khan, V. A., Ebadullah, K., Li, X.M. and Shafiq, M.: On Some Generalized I-Convergent Sequence Spaces Defined by a Modulus Function, Theory Appl. Math. Comput. Sci., 2012; 2(2): 01-11 : ISSN 2067-2764 (ROMANIA).
- [36] Khan, V. A. and Ebadullah, K.: Zweier I-convergent sequence spaces defined by a sequence of modulii, Theory and Application of Mathematics and Computer Science(ROMANIA), Theory and Applications of Mathematics & Computer Science 4 (2) (2014) 211220.
- [37] Khan, V. A. and Ebadullah, K. : Zweier I-Convergent Sequence Spaces defined by Orlicz Function, International Journal of Analysis and Its application, Analysis (GERMANY), Volume 33, (2013)251-261, DOI 10.1524/analy.2013.1195.
- [38] Khan, V. A. and Ebadullah, K. : On Zweier I-Convergent Sequence Spaces,Proyecciones Journal of Mathematics, Universidad Catolica del Norte Antofagasta-Chile(CHILE). Vol. 33, No. 3, pp. 259-276 (2014).
- [39] Khan, V.A., Lohani, Q. M. D.: Statistically Pre-Cauchy sequences and Orlicz Functions, Southeast Asian Bulletin of Mathematics. 2007; (31): 1107-1112.
- [40] Khan, V. A. and Lohani, Q. M. D.: New lacunary strong convergence difference sequence spaces defined by a sequence of

- modulii, Kyungpook Math. J., 2006; 46(4): 591-595.
- [41] Khan, V. A. and Lohani, Q. M. D.: On some almost lacunary strong convergence difference sequence spaces defined by a sequence of modulii, *Mathematicki Vesnik*, 2008; 60: 95-100.
- [42] Khan, V. A. and Khan, N.: On a new I-convergent double sequence spaces, *International Journal of Analysis*, Hindawi Publishing Corporation, Article ID-126163, 2013; 2013: 1-7.
- [43] Khan, V. A. and Khan, N.: On some I- Convergent double sequence spaces defined by a sequence of modulii, *Ilirias Journal of Mathematics*, 2013; 4(2): 1-8.
- [44] Khan, V. A. and Khan, N.: On some I- Convergent double sequence spaces defined by a modulus function, *Engineering, Scientific Research Publishing*, USA, 2013; 5: 35-40.
- [45] Khan, V. A. and Khan, N.: I-Pre-Cauchy Double Sequences and Orlicz Functions, *Engineering,Scientific Research Publishing*, USA, 2013; 5: 52-56.
- [46] Khan, V. A. and Tabassum, S.: On Some New double sequence spaces of Invariant Means defined by Orlicz function *Communications*, 2011; 60: 11-21.
- [47] Kostyrko, P., Mačaj, M. and Šalát, T.: Statistical convergence and I-Convergence, *Real Anal. Exchange*.
- [48] Kostyrko, P., Šalát, T., Wilczyński, W.: I-convergence, *Real Anal.*, 2000; 26(2): 669-686.
- [49] Kostyrko, P., Das, P., Malik, P. and Wilczyński, W.:  $II$  and  $I^*$ -Convergence of Double Sequences-convergence, *Mathematica Slovaca*, 2008; 58: 605-620.

- [50] Köthe, G.: Topological Vector spaces, Springer, Berlin, 1970; 1.
- [51] Kolk, E.: On strong boundedness and summability with respect to a sequence of moduli, Acta Comment. Univ. Tartu., 1993; 960: 41-50.
- [52] Kolk, E.: Inclusion theorems for some sequence spaces defined by a sequence of moduli, Acta Comment. Univ. Tartu. 1994; 97: 65-72.
- [53] Lascarides, C. G.: A study of certain sequence spaces of Maddox and generalization of a theorem of Iyer, Pacific J. Math., 1971; 38: 487-500.
- [54] Lascarides, C. G.: On the equivalence of certain sets of sequences, Indian J. Math. 1983; 25: 41-52.
- [55] Lindenstrauss, J. and Tzafriri, L.: On Orlicz sequence spaces, Israel J. Math. 1971; 101: 379-390.
- [56] Maddox, I. J.: Some properties of paranormed sequence spaces, J. London. Math. Soc. 1969; 1: 316-322.
- [57] Malkowsky, E.: Recent results in the theory of matrix transformation in sequence spaces. Math. Vesnik, 1997; 49: 187-196.
- [58] Nakano, H.: Concave modulus, J. Math. Soc. Japan, 1953: 29-49 .
- [59] Ng, P. N. and Lee, P. Y.: Cesaro sequence spaces of non-absolute type, Comment. Math. Math. 1978; 20(2): 429-433.
- [60] Ostmann, H. H.: Additive Zahlentheorie, Springer-Verlag, Berlin-Göttingen-Heidelberg, 1956.
- [61] Parashar, S. D., Choudhary.: Sequence spaces defined by Orlicz function, Indian J. Pure Appl. Math. 1994; 25: 419-428.
- [62] Ruckle, W. H.: On perfect Symmetric BK-spaces, Math. Ann., 1968; 175: 121-126.

- [63] Ruckle, W. H.: Symmetric coordinate spaces and symmetric bases, *Canad. J. Math.*, 1967; 19: 828-838.
- [64] Ruckle, W. H.: FK-spaces in which the sequence of coordinate vectors is bounded, *Canad. J. Math.*, 1973; 25(5): 973-975.
- [65] Šalát, T., Tripathy, B. C., Ziman, M.: On some properties of I-convergence, *Tatra Mt. Math. Publ.* 2004; 28: 279-286.
- [66] Šalát, T., Tripathy, B. C., Ziman, M.: On I-convergence field, *Ital. J. Pure Appl. Math.* 2005; 17: 45-54.
- [67] Schoenberg, I. J.: The integrability of certain functions and related summability methods, *mer. Math. Monthly.* 1959; 66: 361-375.
- [68] Şengönül, M.: On The Zweier Sequence Space, *Demonstratio Math.* Vol. XL No. 2007; 1: 181-196.
- [69] Simons, S.: The spaces  $l_{(p_\nu)}$  and  $m_{(p_\nu)}$ , *Proc. London. Math. Soc.* 1965; 15(3): 422-436.
- [70] Singer, J.: Bases in Banach spaces, Springer, Berlin. 1970.
- [71] Tripathy, B. C., Hazarika, M.: Paranorm I-Convergent sequence spaces, *Math Slovaca.* 2009; 59(4): 485-494.
- [72] Tripathy, B. C., Hazarika, M.: Some I-Convergent sequence spaces defined by Orlicz function, *Acta Math. Appl. Sin.* 2011;27(1): 149-154.
- [73] Tripathy, B. C. and Hazarika, B.: I-Monotonic and I-Convergent Sequences, *Kyungpook Math. J. Tamkang J.* 2011;51:233-239.
- [74] Wang, C. S.: On Nörlund sequence spaces, *Tamkang J. Math.* 1978;9:269-274.
- [75] Wilansky, A.: Functional Analysis, Blaisdell, New York, 1964.

- [76] Yan, Y.: An interpolation inequality in Orlicz spaces, Southeast Asian Bulletin of Mathematics. 2004;28:931-936.





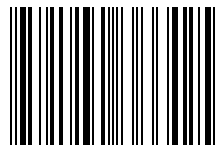
**Ideal****Filter****I-convergence field****I-convergent****Monotone and solid double sequence spaces****Lipschitz function**

## Introduction

The concept of ideal convergence is a generalization of statistical convergence, and any concept involving ideal convergence plays a vital role not only in the pure mathematics but also in other branches of science involving mathematics, especially in information theory, computer science, biological science, dynamical systems, geographic information systems, population modeling and motion planning in robotics.

To order additional copies of this book, please contact:  
Science Publishing Group  
[book@sciencepublishinggroup.com](mailto:book@sciencepublishinggroup.com)  
[www.sciencepublishinggroup.com](http://www.sciencepublishinggroup.com)

ISBN 978-1-940366-42-5



9 781940 366425 &gt;

Price: US \$85