We note that the achievability schemes in Theorem 1 of

N. Devroye, P. Mitran and V. Tarokh, "Achievable rates in cognitive radio channels," IEEE Transactions on Information Theory, Vol. 52, No. 5, pp. 1813–1827, May 2006.

and Theorem 1 of

N. Devroye, "Information Theoretic Limits of Cognition and Cooperation in Wireless Networks," Ph.D. thesis, Harvard University, 2007

use the exact same encoding and decoding scheme. Both achievable rate regions present rates that are achievable. However, their probability of error analyses differ, and the region in Theorem 1 in the Ph.D. thesis, available at https://www.ece.uic.edu/Devroye/Publications

contains that of the 2006 journal paper (i.e. is in general larger, though no claims are made as to which is strictly larger). The discrepancy may be seen in the proof in Appendix A of the thesis, in particular page 94 and surrounding areas.