Errata

- In the proof of Theorem 1, it is implicitly assumed, as is stated beforehand, that the distribution $u(x,t)$ has proper support with respect to t. In fact, this theorem applies to a much wider class of distributions which are 'rapidly descreasing' with respect to t; see Sections 4.3 and 5.1 of

  > T. Oaku: 'Algorithms for D-modules, integration, and generalized functions with applications to statistics', Advanced Studies in Pure Mathematics **77** (2018), pp. 253–352.

  for details.

- In the proof of Theorem 4, the argument in the last part of the proof is insufficient to conclude that the output of Algorithm 8 is holonomic. We can prove that the output is holonomic under the condition that the holonomic system for $u(x)$ be $f_1 \cdots f_p$-saturated and that this condition can be omitted if we localize the input D-module with respect to $f_1 \cdots f_p$. For details, see Theorem 6.10 of the reference above.