Specifically, if all of a distribution’s moments (cumulants) exist and are finite, they completely specify the distribution.

Specifically, if all of a distribution's moments (cumulants) exist and are finite, they completely specify it.

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First of all, since the cumulants are the Taylor series coefficients of the logarithm of the distribution’s characteristic function [2], they constitute a complete description of the distribution only if the characteristic function is infinitely differentiable.

First, since the cumulants are Taylor series coefficients [2], they constitute a complete description of the distribution only if the characteristic function is infinitely differentiable.

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To circumvent some of these issues, we introduce the xyz as a new way of describing discrete RVs.

To avoid some issues, we introduce the xyz as a new way of describing discrete RVs.

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Important constraints, which we shall need later on are presented therein.

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The whole glossary is closely related to these applications, therefore we shall only refer to the term cepstrum if absolutely necessary to minimize any confusions.

This glossary is closely related to these applications, to minimize any confusions we only refer to the term cepstrum if absolutely necessary.
However, as a consequence, the power $xyz$ cannot be inverted in general.

As a consequence, the power $xyz$ cannot be inverted in general.

Such a relation has been found also in [4, p. 1022] and might be of interest for numerically computing the $xyz$ from a given PMF because it would obviate the need to compute an integral.

[4, p. 1022] shows such a relation. No integral computation is needed, the $xyz$ from a given PMF is computed numerically.

Absolute integrability is consequently guaranteed, if...

Absolute integrability is guaranteed, if...

Since the magnitude $(\cdot)$ are equal, ...

Since the magnitude $(\cdot)$ is equal, ...

Taking a closer look at these relations shall lead to further insights concerning the $xyz$s and yield some properties and constraints.

Taking a closer look at these relations yields further insight and some properties and constraints of the $xyz$s.

In [28], the moments of the cepstrum are calculated and it is shown how they correspond to the moments of the original sequence, in order to circumvent the explicit calculation of the cepstrum.

To circumvent the explicit calculation of the cepstrum, [28] shows the correspondence between moments of the cepstrum and moments of the original sequence.

Sufficient conditions for existence and convergence could be derived. (?? Könnten oder konnten)

We derived sufficient conditions for existence and convergence or 
Sufficient conditions for existence and convergence could be derived in future work.
Evaluation of Diverse Compiling for Software-Fault Tolerance

Andrea Höller

However, in this paper we show that diverse compiling also enhances the software fault tolerance by increasing the chance of finding defects in the source code of the executed software during runtime.

This paper shows that diverse compiling also enhances the software fault tolerance by increasing the chance of finding defects in the source code during runtime.

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The goal of diversity methods is to increase the probability that if components fail, that they fail on disjoint subsets of the input space, such that they lead to different consequences and can be detected [2].

The goal of diversity methods is to increase the probability that components fail on disjoint subsets of the input space, leading to different consequences and can so be detected [2].

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Intuitively, the diverse usage of compilers enhances the chance of detecting and tolerating programmatic faults of the compiler.

The diverse usage of compilers enhances the chance of detecting and tolerating faults.

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Additionally, fault tolerance is used to prevent that an existing fault leads to a failure in the system.

Additionally, fault tolerance is used to prevent system failures.

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Several studies have demonstrated that the tolerance against random hardware faults depends on the compilation.

Several studies have demonstrated that tolerance against random hardware faults depends on compilation.

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However, it also mentions that the tool qualification process may be adjusted if multiple compilers are used and the dissimilarity of these compilers can be ensured [17].

However, [17] mentions that the tool qualification process may be adjusted when using multiple compilers which dissimilarity can be ensured.
Diverse compiling can help in the detection of such bugs, since different compilation variants often arrange the memory in different ways.

*Diverse compiling can help detecting such bugs, since different compilation variants often arrange memory in different ways.*

---

Optimizations organize the memory layout in such a way that the execution is accelerated or that the memory consumption is kept low.

*Optimizations organize the memory layout such that the execution is accelerated or memory consumption is kept low.*

---

To summarize, diverse compiling enhances the tolerance regarding memory-related faults, since the different memory management strategies increase the chance that an erroneous read operation on the same memory location returns different values.

*To summarize, diverse compiling widens the tolerance regarding memory-related faults, since different memory management strategies produce different values on an erroneous read operation on the same memory location more likely.*

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To keep the development costs low,…

*To keep development costs low,…

---

This can be the case, if the fault leads to a crash in one variant and to an incorrect output in the other variant.

*This occurs, if the fault leads to a crash in one variant and to an incorrect output in the other.*

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This is also the case if both variants produce an output, but the outputs do not match.

*This also occurs if both variants produce outputs that do not match.*

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We observed that whether a memory-related fault causes an application to crash or to deliver corrupted data, depends highly on the compilation variant and the processor architecture.

We observed that whether a memory-related fault causes a crash or delivers corrupted data depends highly on compilation variants and processor architecture.

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