#### Digitale AV-Technik

Prof. Uwe Hahne Wintersemester 2025/26



# Digitale AV-Technik - Aufgabenblatt 02

#### A) Lektüre

Lies den folgenden Text und unterstreiche die Fachbegriffe, die Du nicht kennst oder verstehst:

The fact that you're interested in taking the course suggests that you're probably aware of the important role that digital techniques have been playing in signal processing, in general. And in fact, the impact of digital technology has been rather dramatic. And the indications are that it will be even more so in the future. One of the primary advantages to digital as opposed to analog signal processing techniques is the tremendous flexibility that digital techniques and digital signal processing offers. And because of this flexibility, digital signal processing techniques have found application in a rather large or wide variety of areas. Speech processing, for example, has represented one of the major areas of application of digital signal processing for, at least, the past decade. Both analysis of speech and synthesis of speech rely very heavily on the notions of, for example, digital filtering, other notions, such as the Fast Fourier Transform algorithm, and a variety of the other digital signal processing techniques and algorithms. More generally, in communication systems, digital signal processing is being used for coding, for multiplexing and, in fact, there is a considerable amount of work being done at present directed toward, basically, replacing all of the present filtering in communications and telephone systems by digital filters instead of analog filters. And I think that it's likely that, in the not too distant future, we'll see most of the filtering in communication systems being done digitally. (5 Minuten)

#### B) Klärung der Fachbegriffe

Diskutiere die unbekannten Fachbegriffe mit 2-3 Mitstudierenden. *(10 Minuten)* 

## C) Kernaussage

Identifiziere die Kernaussage des Textes und formuliere diese in einem Satz (auf Deutsch). Stelle dein Ergebnis im Plenum vor.

(10 Minuten Vorbereitung, dann 1 min pro Person)

## D) Analyse

Was glaubst Du woher der Text stammt? Aus welchem Jahr ist er? Wer könnte Autor\*in sein? Stelle dein Ergebnis im Plenum vor.

(5 Minuten Vorbereitung, dann 1 min pro Person)