

		Deviation from the reference due to													
	log(peak intensity)	Expected = reference abundance	+ feature	+ condition or time	+ between- condition interference	+ biol. replicate	+ between- subject interference	+ Random meas. error							
General case	Group comparison:														
	y_{ijkl}	$=$	μ_{1111}	$+$	F_i	$+$	C_j	$+$	$(F \times C)_{ij}$	$+$	$S(C)_k$	$+$	ε_{ijkl}		
	Time course:														
	y_{ijkl}	$=$	μ_{1111}	$+$	F_i	$+$	T_j	$+$	$(F \times T)_{ij}$	$+$	S_k	$+$	$(T \times S)_{jk}$	$+$	ε_{ijkl}
	Paired design:														
	y_{ijkl}	$=$	μ_{1111}	$+$	F_i	$+$	C_j	$+$	$(F \times C)_{ij}$	$+$	S_k	$+$	$(C \times S)_{jk}$	$+$	ε_{ijkl}
Single feature with technical replicates	Group comparison:														
	y_{1jkl}	$=$	μ_{1111}	$+$			C_j	$+$			$S(C)_k$	$+$	ε_{1jkl}		
	Time course:														
	y_{1jkl}	$=$	μ_{1111}	$+$			T_j	$+$			S_k	$+$	$(T \times S)_{jk}$	$+$	ε_{1jkl}
	Paired design:														
	y_{1jkl}	$=$	μ_{1111}	$+$			C_j	$+$			S_k	$+$	$(C \times S)_{jk}$	$+$	ε_{1jkl}
Single feature, no technical replicates	Group comparison:														
	y_{1jkl}	$=$	μ_{1111}	$+$			C_j	$+$					ε_{1jkl}		
	Time course:														
	y_{1jkl}	$=$	μ_{1111}	$+$			T_j	$+$			S_k	$+$	ε_{1jkl}		
	Paired design:														
	y_{1jkl}	$=$	μ_{1111}	$+$			C_j	$+$			S_k	$+$	ε_{1jkl}		
Single subject with technical replicates	Group comparison:														
	y_{ij1l}	$=$	μ_{1111}	$+$	F_i	$+$	C_j	$+$	$(F \times C)_{ij}$	$+$			ε_{ij1l}		
	Time course:														
	y_{ij1l}	$=$	μ_{1111}	$+$	F_i	$+$	T_j	$+$	$(F \times T)_{ij}$	$+$			ε_{ij1l}		
	Paired design:														
	y_{ij1l}	$=$	μ_{1111}	$+$	F_i	$+$	C_j	$+$	$(F \times C)_{ij}$	$+$			ε_{ij1l}		
Single subject, no technical replicates	Group comparison:														
	y_{ij11}	$=$	μ_{1111}	$+$	F_i	$+$	C_j	$+$					ε_{ij11}		
	Time course:														
	y_{ij11}	$=$	μ_{1111}	$+$	F_i	$+$	T_j	$+$					ε_{ij11}		
	Paired design:														
	y_{ij11}	$=$	μ_{1111}	$+$	F_i	$+$	C_j	$+$					ε_{ij11}		